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ABSTRACT

This volume is a career education resource which can be used alone or with the complementary Career Data Book, and illustrates career development patterns of former (1960) high school students. This resource describes the high school interests and abilities of individuals in different stages of their career development, and presents profiles based on 138 occupations. It is intended for counselors, teachers, and others interested in facilitating an individual's exploration of careers, and is oriented toward the practitioner rather than the researcher. (LFB)

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USING THE TALENT PROFILES IN COUNSELING:

A Supplement to the Career Data Book

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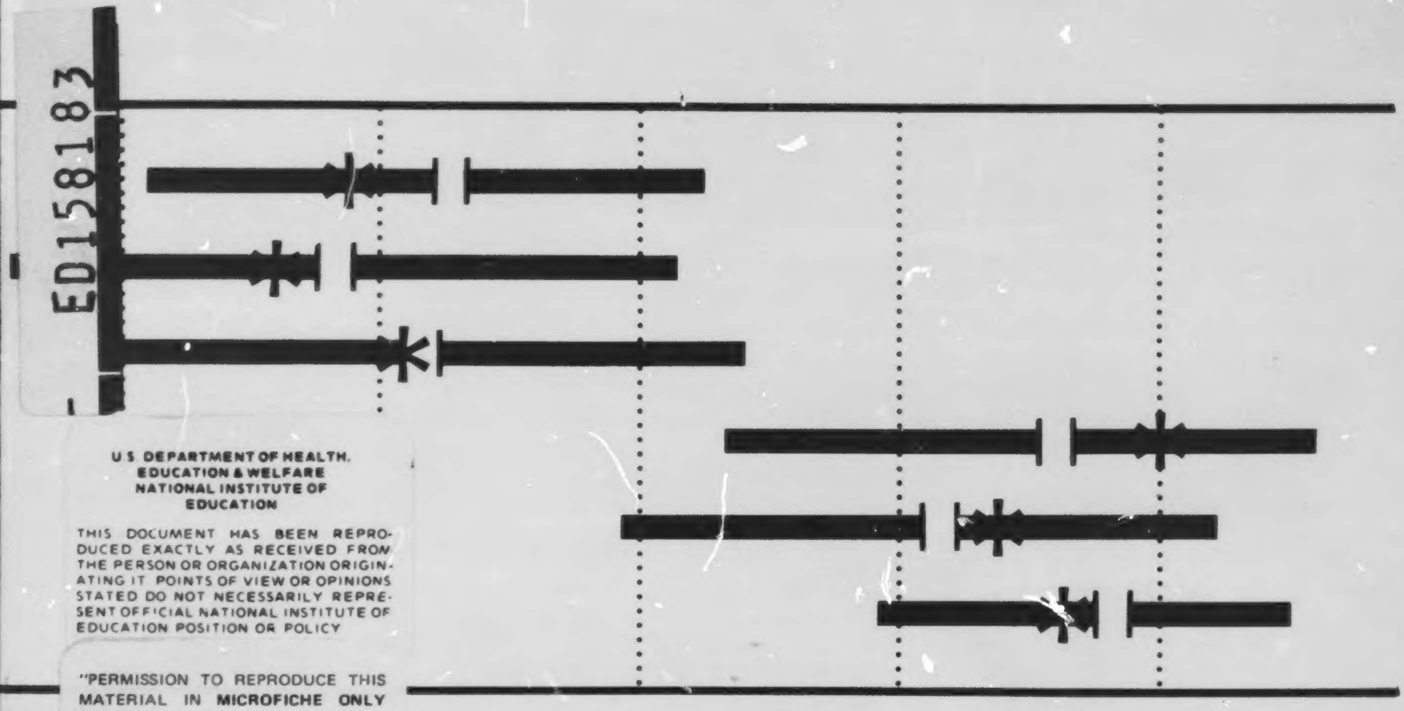

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Robert J. Rossi ▪ Wendy B. Bartlett
Emily A. Campbell ▪ Lauress L. Wise ▪ Donald H. McLaughlin

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PROJECT TALENT

American Institutes for Research
1975

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A Supplement to The Career Data Book

Robert J. Rossi
Wendy B. Bartlett
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American Institutes for Research
Palo Alto, California
November 1975

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Interim Report

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November 1975

It is exciting to reflect on the implications that the concept of career education can have for change in our educational institutions and programs. By helping youth think about the many options and alternatives that are available and by helping them to make the best use of their talents, abilities, and skills, we can demonstrate the relationship and relevance of the educational process to work, leisure, and life-style choices. Now, if we can identify the basic fundamental skills as well as the job skills each student needs and can facilitate their development at the peak of each person's interest, then career education--education for the totality of one's life experiences--will have become a reality.

--Wilson Riles
California State Superintendent
of Public Instruction
1974

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PREFACE

The American Institutes for Research published The Career Data Book (Flanagan, Tiedeman, Willis, & McLaughlin, 1973), based on data gathered from the 5-year follow-up study of Project TALENT participants. The Career Data Book includes a series of profiles, with each depicting some of the abilities, interests, knowledge, and other characteristics of high school students in 1960 who 5 years after high school planned to become physicists, machinists, nurses, airplane pilots--138 occupations in all. This resource for career planning was published as a first step toward one goal of Project TALENT--to provide a practical method for improved career guidance. It provides the high school student with a means for evaluating his or her position relative to alternative career opportunities. In addition to profiles of 38 individual characteristics, the book presents summary information about job characteristics: training requirements, job responsibilities, and possible rewards. Methods for estimating student profiles and for organized searching of the career profiles are presented, along with short examples of how the profiles might be used in specific cases.

The Career Data Book was only an interim report, because the 5-year period after high school was not long enough to provide a stable estimate of more than the career plans of the Project TALENT participants, who were then about 22 years old. Upon completion of the 11-year follow-up, the Project TALENT staff hopes to develop a sophisticated career planning tool based on the collected experiences of the participants. The present report, based on one-half of the 11-year follow-up data, is an intermediate step toward that goal. It is intended for counselors, teachers, and anyone interested in facilitating individuals' exploration of careers. Using the TALENT Profiles in Counseling: A Supplement to The Career Data Book is oriented toward the practitioner rather than the researcher. The profiles it contains and those in The Career Data Book are placed in the counseling context, and ways to use these materials are highlighted.

ACKNOWLEDGMENTS

This publication could not have been written without the cooperation of some 50,000 TALENT participants who responded to the 11-year follow-up. Their collected thoughts and career decisions are the basis of these 11-year occupation profiles. The Project TALENT staff responsible for the gathering, coding, and computer processing of these data must also be recognized.

Sections 1, 2, 3, and parts of sections 4 and 5 were written by Robert Rossi. Wendy Bartlett and Lauress Wise wrote the description of the profiles in section 4 and were responsible for the computer generation of the profiles. Emily Campbell abstracted the TALENT materials presented in section 5. Lauress Wise and Donald McLaughlin designed the format of the profiles and resolved all methodological issues concerning their content.

We thank Anita Mitchell and H. B. Gelatt for reviewing early drafts of the report and extend special thanks to Robert A. Sampieri, Coordinator of Comprehensive Career Education for the Los Angeles Unified School District, and Richard Carey, Director of Guidance for the Palo Alto Unified School District, for their comments and suggestions for improvement.

Section 1: Introduction to TALENT

In 1960, after much discussion and planning, John C. Flanagan's proposed longitudinal survey of the nation's talents was initiated. More than 400,000 students in 1,353 public, private, and parochial secondary schools in all parts of the country took the Project TALENT tests. These schools were sampled representatively (altogether between 4% and 5% of all secondary schools in the United States were included) and all the students in grades 9-12 at each school were involved. The TALENT test battery, which required two days of testing time, consisted of numerous aptitude and achievement tests and three inventories: student information, student activities, and student interest. To complete the first data collection phase of Project TALENT, classroom teachers (in cooperation with school guidance counselors) administered the tests to students, collected the answer sheets, and returned them to the Project TALENT test headquarters at the Measurement Research Center at the University of Iowa. A much more detailed description of Project TALENT--the idea, development of tests, and selection of schools--is found in _Design for a Study of American Youth_ (Flanagan, Dailey, Shaycoft, Gorham, Orr, & Goldberg, 1962).

Since this first phase of data collection, two additional phases have been carried out according to 1960 plans, and the third is in progress. For the follow-up study one year after high school graduation, a questionnaire was sent to each TALENT participant. Since four grade groups were initially involved, the 1-year follow-up amounted to a four-year collection of data (i.e., students in the 9th grade in 1960 did not graduate until 1963, three years after those students who were seniors in 1960). From these data the importance of Project TALENT for persons interested in career planning was clearly indicated. Some of these early findings are presented in _Project TALENT One-Year Follow-Up Studies_ (Flanagan, Cooley, Lohnes, Schoenfeldt, Holdeman, Combs, & Becker, 1966).

With this more immediate sense of the potential of the project, the TALENT staff at the American Institutes for Research decided to develop a career guidance resource that would serve both as a useful reference for counselors and students and as a prototype for the sort of counseling-vocational guidance materials that could be made available as TALENT moved to its 11-year and 20-year follow-up studies. The Career Data Book is this prototype resource material. And just as the 1-year study and report helped refine and direct the 5-year follow-up, this latter study provided direction for the 11-year follow-up begun in 1971.

The 11-year follow-up, the ongoing fourth phase of Project TALENT, is now underway--the 10th-grade data (i.e., data on students who were sophomores in 1960) have just been coded for storage in the computerized data bank and the fourth mailing of 9th-grade questionnaires was completed in March 1975. (Usually four "waves" or mailings are conducted so that as many of the original participants as possible have a chance to respond.) Because 9th- and 10th-grade data are unavailable at present, the career profiles presented in section 4 are based on data collected from the 11-year follow-up of 11th- and 12th-grade TALENT participants.

Section 2: Use of the TALENT Profiles in Counseling

The TALENT profiles describe the high school interests and abilities of individuals in different stages of their career development. The 5-year profiles, those in The Career Data Book, are based on the occupational plans or choices of the TALENT participants five years after their graduation from high school. The profiles in this Supplement to The Career Data Book are based on the occupational choices of TALENT participants 11 years after their high school graduation. Thus, these profiles are especially helpful for counselors interested in the career guidance of pre-high school and high school students. They can be used to strengthen the association of school to work and thereby can help in the reform of education advocated by Kenneth B. Hoyt (1974) in his paper, An Introduction to Career Education.

The examination of various occupation profiles can suggest areas for possible improvement if particular careers are considered seriously. Students can see how 1960 high school students were doing, what they were interested in, and what jobs they are in today. With the 11-year profiles they can find out which aspects of occupations were reported as satisfying and not satisfying. The Career Data Book presents descriptions of the occupations, along with information about job responsibilities, requirements, and salaries. Students who "discover" an occupation or career group by one of the several methods suggested in The Career Data Book can therefore find out what the job or jobs are like--something they may not have known before. From this information the counselor can derive ideas for career exploration in the school or in the community. For example, the student who wants to know if "vocabulary" really is an important ability for salesworkers to have can be referred to professional sales people. The student who wants more information about a particular job may be referred to the Occupational Outlook Handbook (U.S. Bureau of Labor Statistics) or to other relevant materials available either in the school library or counseling office.

The profiles themselves can be used in many ways. They can be made available for students to browse through--to get ideas from. They can be used in conjunction with similar data obtained for the student to discover occupational alternatives. They can provide the basis for structured counseling sessions or career planning classes designed to increase students' self-awareness. These TALENT materials provide for a realistic, alive approach to vocational guidance. Students are not told "what it takes to be a . . ." but instead are shown patterns of former high school students' career development. In short, they are given something to think about rather than something to memorize.

Both The Career Data Book and Using the TALENT Profiles in Counseling are useful counseling tools. While they may be used separately, since each presents a complete set of occupation profiles, best use of these materials is made when they are considered together. These two career education resources are not so much comparable as complementary to one another. As noted above, where the 5-year report concentrates on general job descriptions and profiles based on career plans, the 11-year report focuses on particular job aspects and presents profiles based on career choices. They thus describe two phases in the on-going career development of over 100,000 Project TALENT participants.

Section 3: Three Counseling Episodes

In this section, three hypothetical career guidance counseling episodes are presented, placing in context the use of The Career Data Book and Using the TALENT Profiles in Counseling: A Supplement to The Career Data Book. These episodes are intended to make it easier to understand how the TALENT profiles can be used in career guidance.

EPISODE ONE

Robin, a junior at Franklin High, is on time for her appointment with Mr. Dickens, a school counselor.

"Good morning, Robin. In to see about something specific or just to talk?"

"Well, I'm worried about what I'll do after graduation. My parents keep saying how important college is, but I'm tired of school. I don't know, I'll probably change my mind, but right now I don't know."

"Have you thought about getting a job when you graduate, or would you rather take some time off? Maybe take some courses at Coronado [a junior college in the area]. You've got a lot of possibilities."

"I guess so, but, well, I don't know."

EPISODE TWO

Richard, a senior at Franklin, steps into Mr. Dickens' office to talk about his future plans.

"Come in, Richard. Let's see, you said you wanted to talk about the Army."

"Right. I heard they can train you in all kinds of jobs, and I'm still interested in working with electronics. But it's either the Army or trying to get a job at Wilson's [a large industrial employer in the area]. What do you think?"

"Gee, I don't know. What do you want to work on? You know, your own projects, or would you be happy being a part of a team or an assembly line?"

"I think I'd like to do my own projects, but my father said for jobs like that you need some college. Do you?"

EPISODE THREE

Sarah, a Franklin sophomore, arrives for her appointment with Ms. Edwards, a school counselor, loaded down with textbooks.

"Am I late? I got involved talking about a math problem."

"No, you're not late. What was the problem?"

"Just one in the geometry homework from last night. I sometimes think I'll never get into proving theorems."

"Well, geometry is kind of a different way of approaching problems, isn't it?"

"It must be."

"I'm sure you'll get it."

"I'd better if I'm going to make it to the University. You can't do very much work in the sciences without a strong background in math, and you need good grades in geometry to get into high school calculus."

"Interested in the sciences then?"

"Yes, I've made up my mind to become a doctor."

These three cases are hypothetical, but are meant to be typical of the kinds of interactions that can occur between counselors and students in the schools. They are particularly useful in demonstrating how the TALENT profiles can be used. Robin, Richard, and Sarah differ in their voiced career plans and they are in different high school grade levels. Because they are each unique individuals, it would be a mistake to suggest that they all can be treated alike--that the same aspects of the same career planning materials should be emphasized for all of them. This sort of approach would fail on account of its being too restrictive. It is up to the counselor to use materials such as the TALENT profiles, or to guide the student's use of these materials, so that the activity is directed by student-felt needs and not by the materials themselves. In short, the counselor who sketches a profile of Richard, for example, and who attempts to help him decide between the Army, Wilson's, or college on the basis of profile-matching ("Let's see which profile your profile is most like") has missed the point of these materials. If profile-to-profile matching were all there is to vocational guidance, then counselors would not need special, professional training nor would they need to be concerned about what are the expectations and hopes of their students.

A word of caution is also in order here concerning the drawing of the student's ability, interest, and information profile. It is true that using the TALENT profiles is most effective if such a profile is available. But Sarah's profile is not Sarah. It is neither all that she is now nor is it all that she can be. What her profile tells is something about what she knows and can do at the time the profile is drawn. While abilities and even some interests may remain more or less constant over time, they may be improved or refined. Sarah can change her profile and so can Robin and Richard. And these changes will in all likelihood not be merely the result of schooling.

Work experience is educational too. But it is probably less common to think of a job as a place for refining interests or improving skills because a job is usually viewed as something one "prepares for" or "goes into." It is as if career guidance often becomes a matter of telling a client what he or she is qualified to do--what he or she can be or cannot be. In short, the counselor's job becomes that of facilitating the selection of clients by jobs rather than that of placing individuals in occupations that can provide them with learning experiences for further career development. One may argue that placement is what counselors do. But often what passes for placement is a modified form of selection that concentrates on the individual's profile and finds a job with just these requirements. What placement should involve is not just consideration of the individual's current profile but of his or her occupational and personal goals as well. In this way the client can be placed in a job with the understanding that this placement is designed to help "fill out" the profile in areas that must be improved or refined if eventual attainment of the occupational goal is to be realized.

Both Mr. Dickens and Ms. Edwards are counselors committed to a placement approach. For this reason, both counselors work hard to explore career alternatives with their students, to consider various goals, to develop tentative career paths or job-chains, and to try to provide students with a wide range of vocational exploratory activities (along the lines suggested by Jordaan, 1963). And, throughout their dealing with students, both Ms. Edwards and Mr. Dickens take special care to discover and deal with factors that may limit the full development of these clients, that is, factors that might tend to confirm negative predictions. Most noticeable among these factors are sex, race, and socioeconomic status discrimination.

Neither Mr. Dickens nor Ms. Edwards believes that the counselor's ultimate goal is to have students choose a career plan. Rather, it is of more importance to them that each of their students be better able after counseling to consider carefully all available options. In short, these counselors concentrate on making students more aware of just what they can be and can do. Super (1964), Flanagan (1970), Ginzberg (1971), and Kaufman (1973) all have stressed the importance of decision-making: for counseling, for occupational preparation, and, generally, for living. The TALENT profiles provide a key to various career path or occupational goal alternatives. Keep in mind, however, that there is more than one way to use these materials. Ms. Edwards and Mr. Dickens will, as a part of their approach, need to tailor their use of the TALENT profiles to the students they counsel.

Robin, Richard, and Sarah are different individuals with different needs and wants. They each present their counselors with a unique set of problems. Robin is totally undecided about her future. Richard is more clear but seems to be unduly restricting himself to two alternatives. And Sarah, who appears to be the most certain about her future, may be too quickly channeling herself into a single career path. Ms. Edwards will want to find out if Sarah understands just what "being a doctor" involves. Mr. Dickens, on the other hand, will be trying to encourage Richard to take a broader look at possible job alternatives, while, with Robin, he will be working to assist her in formulating occupational goals.

A. Episode One: Robin clarifies her future.

Robin is a junior and has, apparently, no idea of what occupation she might like to pursue. Mr. Dickens must begin by getting to know more about Robin. She may be undecided because she knows (or cares?) nothing about jobs or because she knows little about herself. It may be both of these factors. If she knows herself but knows nothing of jobs, then Mr. Dickens will want to find out why this is so.

"You really are that undecided, huh?"

"Yes, it's beginning to scare me. I know I've got to pick something."

"Well, one thing to keep in mind is that no decision you make is final, for all time. If you go to college, you can always

> work part time. If you drop out, you can use the time to check out some jobs. One thing you might find out about is what options you'll have if you go to college instead of working."
>
> "That's why I'm confused. I don't know where to start."
>
> "Well, one way to begin is to make an assessment of yourself--you know, get a picture of where you are right now. Here are some abilities, interests, and information areas that might interest you. Maybe you already know a lot about them or how to do some of them. If you have some time, just go down the list and rate yourself on each--say in relation to the other kids here at Franklin."
>
> "How?"
>
> "One way that seems to work is to rate yourself as extremely high, very high, high, somewhat above average, average, somewhat below average, low, or very low. And don't be embarrassed. If you think you are extremely high on one of the scales, say so! When you're done, come back and we'll talk about what you want to do."

Mr. Dickens needs to find out if Robin knows herself. By asking her to evaluate herself, he can get a feeling for how self-aware she is. By asking her to carry out the self-evaluation outside of his office, he will be getting a measure of how much she cares about career planning, and because he knows something of Robin's school performance, from teacher evaluations and some test scores, Mr. Dickens will be fully prepared and can ask Robin's help in understanding certain aspects of her own evaluation. O'Hara and Tiedeman (1959) have suggested that the use of self-evaluation rather than formal testing may be quite useful for selected variables.[1] But what happens when Robin returns with her evaluation?

> "Well, you're done?"
>
> "Yes, it was kind of hard but it's the best I can do."
>
> "Pretty sure you've been fair with yourself?"
>
> "I think so."

---

[1] In particular these authors note that: "Interest test scores are most highly related to their [9th-12th grade boys'] respective self ratings with correlations for work values, general values, aptitudes and social class following in that order. Only in the twelfth grade is the order changed. By the senior year the relationship of aptitudes to self ratings of aptitudes surpasses that of general values to self ratings of those values." (p. 298)

"Well, that's good. Some people think that rating themselves is like bragging, but it really isn't."

"No, I think I was honest."

"Good! Hmm, what about this math reasoning? Isn't this kind of low for you?"

"I don't think so. Lots of kids are doing better."

"Don't forget that algebra is new to you. A lot of the other kids had some algebra in eighth grade."

"I guess so. But I had even more trouble estimating my ability on Visualization in 3D--you know, that one under ability test on the profile sheet."

"That is a tough one to estimate without knowing more precisely what the test is about. Were there others you had problems with?"

"Yes. I guess I need to see the tests in order to understand what the difference is between Mathematics Information and Arithmetic Reasoning. It's pretty hard to rate myself on them when I don't know what they're about."

"You're right about that. The two math tests are different. The Mathematics Information test asks about what you already know in math while the Arithmetic Reasoning test asks about what you can do. You know, it might be a good idea for you to take tests on some of these ability and information areas you are uncertain about. What do you think? Do you have the time?"

"Sure. I really could use some help."

Mr. Dickens has suggested Robin take some tests in those areas about which she is confused. This is a good idea, especially since Robin pointed out the particular areas. What tests can he use? The Project TALENT tests are only available for research use; however, AIR has developed a battery of tests, Planning Career Goals, specifically equated to the TALENT battery and designed for use in career guidance. This new battery will be published by CTB/McGraw-Hill in 1976. Other tests that may be used to estimate equivalent TALENT scores on some of the ability scales are the Differential Aptitude Test (DAT), the General Aptitude Test Battery (GATB), and the Flanagan Aptitude Classification Tests (FACT). The Career Data Book presents appropriate conversion tables for these tests. In addition, suggestions are made regarding interest tests that may be used to estimate some of the TALENT scales. Mr. Dickens can then integrate these test scores, given in percentiles, with Robin's own rating on the other items by converting her rating to percentiles. (He could ask her to do this since it is a straightforward procedure.) For her rating, he can assign percentile scores in the manner suggested in *The Career Data Book*:

Extremely high = 90th percentile
Very high = 80th percentile
High = 70th percentile
Somewhat above average = 60th percentile
Average = 50th percentile
Somewhat below average = 40th percentile
Low = 30th percentile
Very low = 20th percentile

As a result, Robin now has a picture of her "person-now" profile, which is in a form comparable to the TALENT profiles. And these occupation profiles may now be looked at more closely as a source of ideas.

> "Well, Robin, now we've drawn a profile of you."
>
> "Pretty low in some areas, huh?"
>
> "Remember, Robin, what is low, in the middle, or high isn't necessarily fixed for all time. You're going to change, your profile will change, and you'll be the one who changes it. What's important is that you change or grow the way you want to."
>
> "But my mother says you've got to decide what to do early so you don't get left behind. I don't want just any job. I want to do something I like."
>
> "What do you want to do at forty?"
>
> "Come on, I don't even know what I want to do now!"
>
> "That's the point. What your goals are for yourself now may change as you change. It's good for you to think about what you want to do, but remember that any decisions you make now are not final. You'll be making other decisions too."
>
> "Well, I've thought of being a teacher, but I'm not sure."

Robin has expressed one idea. Perhaps when the decision of what to do is made less finalistic, she will be better able to say what she wants. But Mr. Dickens should not immediately try to find out what kind of teacher Robin wants to be and then open to the particular TALENT profile. This would effectively move the process of clarifying alternatives back within the pressures of "deciding now and being committed forever." Instead, he would do well to explore with Robin just what aspects of teaching are interesting to her--the pay, the hours, the opportunities for moving into administration or counseling, working with small children or teenagers, and so forth. He may find that Robin's interest in teaching involves her feeling that, excluding nursing, teaching is the only professional position with prestige that is open to women. If this is the case, Mr. Dickens needs to help Robin determine what job or jobs she would take if it were not for this apparent sex discrimination. That such discrimination exists is not the issue. Mr. Dickens is not, or should not be, overly concerned with what "it" is really like "out there" in the world of work. His responsibility is to help Robin. In her case particularly he must work to open up new possibilities and help her recognize all the opportunities that are available.

Suppose, then, it is the case that Robin feels teaching might be a good career for her because it offers prestige. What should Mr. Dickens do?

> "Are there other jobs you think have prestige?"
>
> "Sure, there are a lot--if you're a boy. Just like basketball, baseball, and other sports, girls don't really get a chance in jobs."
>
> "Well, if you could be anything, what would you pick that has the kind of importance you're after?"
>
> "I don't know, maybe a lawyer."

Here is an opportunity for vocational exploration. Mr. Dickens may see what other occupational goals Robin has in mind and then refer her to the TALENT profiles. To match up her profile? Hardly. By examining those profiles that depict the high school and on-the-job characteristics of workers in those careers she is considering, Robin can literally see those areas in her own profile that will be especially important should she pursue a particular occupational goal. She can evaluate those ratings of job satisfaction made by workers in the job and see if her own interests, likes, and dislikes are comparable.

It may be that one or the other of her own profile dimensions suggests a range of possible occupations (e.g., her high interest in biological science) or that combinations of these profile aspects suggest possible jobs. The lists of the 25 occupations highest on each scale reported in The Career

Data Book will be helpful here. By looking at Biological Science Interest, for example, Robin will find 25 occupations for which her own high interest in this area will be a real asset. But what happens when she notices that the profile for lawyers shows them to have been more proficient in English in high school than she is? Will she become convinced that being a lawyer is not really possible?

> "I think being a lawyer would be really great. But even if I could get by the fact that mostly boys go into law, this profile for lawyers is just not like mine. Look at their score in English compared to mine. Even though I estimated my score while they took tests to get theirs, look how much lower my score is."
>
> "Well, there are two things you've got to keep in mind. The first and most important is that you can change your profile. The one for lawyers is important for you now because it can point out the precise areas in your profile that you might think seriously about working on. The fact that, on the average, people who become lawyers had high scores in English when they were in high school tells you that it probably would be a good idea to work on your skills in this area because it is likely to be important for being a successful lawyer. One thing you might do is check on your own estimate by taking a short test on English ability. And bear in mind that many lawyers' test scores are represented in the profile for this occupation. Not all lawyers scored high on this test in high school. So while it is a good idea for you to think about refining this ability, don't think that you're the only person who ever had to work hard in English in order to achieve a career goal."

Is Mr. Dickens finished? Has he exhausted the TALENT profiles as far as Robin is concerned? The answer is no. The profiles aren't designed to match students to jobs. Robin has not decided to become a lawyer. She has decided to think about this as one of many possibilities. With Mr. Dickens' help, she may get involved exploring particular facets of her profile in relation to the educational opportunities provided by this occupation and others she finds interesting. Mr. Dickens may still need to help her clarify just how she wants to improve herself. He has, however, provided Robin with a way of critically evaluating possible occupational goals. She is ready to use the TALENT profiles on her own, to explore what she wants for herself. And when she uses these materials, Robin, thanks to Mr. Dickens, will be thinking of how she can improve herself through her vocational choices rather than how she can "fit herself" into the world of work.

Episode One Review

Problem: Robin's indecision about her future

Counselor's Approach:

1. Ask Robin to evaluate herself on several interest, information, and ability variables.
    a. Let Robin make the evaluation outside of the counseling office.
    b. Obtain information about Robin from other sources.
2. Suggest that Robin take some tests in those areas of her self-evaluation she had difficulty estimating.
3. Integrate self-evaluation with test scores; construct a profile of Robin.
4. Talk with Robin about what she would like to do.
    a. Work to open up new career possibilities.
    b. Help Robin to recognize available career opportunities.
5. Refer Robin to the TALENT profiles and advise her to check those occupations in *The Career Data Book* that are high on interests comparable with hers.
6. Assist in critical evaluation of occupational goals.

Key Concepts:

1. No decision one makes about an occupation is final.
2. One's self-assessment is important.
    a. Self-assessments can be put into the form of ratings.
    b. One must be fair to oneself when making self-evaluations or ratings.
3. A person changes--is not static.
    a. One's profile will change.
    b. One's occupational goals will change.

4. Vocational exploration is the counseling goal.
    a. Profile-matching is not the aim.
    b. Critical evaluation of possible occupational goals is important.

B. Episode Two: Richard broadens his perspective.

> "Sometimes you do need college but not always."
>
> "Well, you see, I've got a problem there. College is O.K. and, don't get me wrong, I think people who are smart should go, but, well, I don't think it's for me."
>
> "How come?"
>
> "Well, uh, I can probably learn a lot more about electronics on the job, you know, on-the-job training."
>
> "Oh, then, you've already looked into the possibilities. That was smart. Wilson's has a program that would train you?"
>
> "I'm not real sure but I think they do."

Has Richard really checked out the possibilities for getting on-the-job training? Probably not. Why then is he so quick to rule out college? Is Richard one of those "early emergers" Super (1964) refers to who know very early just what he wants and how to go about getting it? These questions are hard to answer based only on the information given in the two excerpts from Mr. Dickens' meeting with Richard presented above. But Mr. Dickens has sought out some other information about Richard. One problem about college may be due to the fact that Richard's family is not doing very well financially. His father is an auto worker who was laid off recently. His mothers works as a payroll clerk at a nearby laundry and doesn't make much money. The family income per month is just over $650, and with five children this is hardly enough to meet basic family needs. Can it be that Richard has ruled out college because of the expense?

> "Will they pay you while you train?"
>
> "Yeah, I'm pretty sure they pay you."
>
> "Well, that will probably help."
>
> "You bet."

"You'll probably be getting a faster car with all your earnings."

"No, I don't think a car, at least not right away. I want to be able to help out at home."

"Your father is still out of work?"

"Yeah. Things aren't looking too good."

"Well, Wilson's isn't the only job that will pay you while you train. There are other possibilities, even college. Suppose you could go to college for free and get a part-time job on the side?"

"Yeah. But I think Wilson's is easier."

Money is one factor in Richard's thinking about college. But it may also be that he would rather learn on the job. The important thing is that Richard does not have to attend college in order to keep as many of his options open as possible. Super (1964) suggests that college choices are crucial for the student who wishes to continue his exploration, whether the "multiple-talented" or the "late bloomer." But what about students who don't seem ready for college when they graduate from high school? Ginzberg (1971) has noted that little attention is paid to the alternative decisions of low-income groups. In fact, he pointed out that students from low-income families are often neglected by counselors because they do not have a sufficiently varied set of alternatives. He wrote:

> When counselors are hired, it is made clear to them that college advising is one of their primary responsibilities. In other communities, where the trend to college is less pronounced, many guidance counselors tend to select from among the total student body those who are college-bound, since they know how to help these young people. School counseling has become more and more counseling for college. (p. 42)

What can Mr. Dickens do?

"Let's back up a bit. Did you say you want to work on your own projects or will you be happy working on an assembly line?"

"I want to do my own projects."

"Do you think you will mind if you have to start off as an assembly line worker?"

"Well, I guess it would be O.K. as long as I get the chance to move up."

"And what about the Army? That was another possibility, wasn't it?"

"Yeah. I've heard that the Army can be a pretty good deal, but I guess I'd be on the line there too."

"I don't know. That's something you could check on though. And when you do, be sure to look into the schooling opportunities they offer."

"They send you to school?"

"Yes, they offer quite a few opportunities."

"Gee, that's something to check on all right!"

"Don't forget that jobs can help you improve yourself too. Whether or not you go to college, you should look at jobs from the standpoint of how they can help you develop your abilities and interests."

"Well, I just think that electronics is what I want."

"Sure, but isn't electronics going to involve doing some math and maybe even writing up some plans? You might even want to try your hand at working on the energy problem. You know, thinking up new ways to make things work."

"Yeah, I guess I would. But the money is really important."

"Well, keep in mind that other aspects of a job may be more important to you than money when you're thirty. I respect your wanting to help out at home, but don't forget about yourself either. You might check out these occupation profiles based on the high school test scores of individuals who are now in the occupation. Each profile points out some of the aspects of the job these people in the job say are satisfying or not satisfying to them. You can get a better feeling for some of the other things you might want from a job in the future besides money."

Is Mr. Dickens wasting his time? In the end will Richard choose a job solely on the basis of money? Perhaps. But if he does, Mr. Dickens would still be advised to help Richard work out some job alternatives. Not all the jobs that Richard might take will provide him with growth opportunities conducive to satisfaction on the job or on future jobs he may take. The TALENT profiles will be useful here because they note those particular aspects of the profiles which are associated with a measure of job satisfaction as reported by the TALENT participants. More than this, the profiles do present many occupational alternatives that Richard might like to think about.

> "Even if you pick the job that pays the most, spend some time thinking about what you want now as well as in a couple of years from now when money may not be so important. When you look at these profiles, just write down the pages of the jobs you think you would like to have and those you think would be best right now. Then come back and we'll talk some more. In the meantime I'll check on some other possibilities. Maybe I can come up with some ideas about money that we haven't thought of."

Will Richard use these profiles? Mr. Dickens can't be sure. But Richard has defined his job possibilities pretty narrowly, at least for the present. "Either the Army or Wilson's" is not much of a choice. The TALENT profiles may move Richard beyond this constrained situation by making him aware of other possible occupational goals. Unlike Robin, Richard was not asked to evaluate his profile. Mr. Dickens probably felt this move would have been premature. It might have convinced Richard he could do nothing else but "the Army or Wilson's." Before the examination of his own profile, Richard needs to be made more aware of what he can do besides being a Wilson's employee or joining the Army. If he eventually chooses Wilson's or the Army, Mr. Dickens has not failed so long as Richard makes a free choice and not a forced one.

Episode Two Review

Problem: Richard's very narrow view of career possibilities

Counselor's Approach:

1. Talk with Richard to understand better what factors may be underlying his limited view of career possibilities.
2. Find out what Richard's career goals are and how they fit into the context of his present occupational choice.
3. Suggest some opportunities for self-development offered by various careers.

4. Use the TALENT profiles to point out some aspects of different occupations reported as satisfying or not satisfying by TALENT participants in these jobs.

5. Encourage Richard to take a set of the TALENT profiles home and to look through them.

    a. Suggest that he note the page numbers of occupations that seem interesting.

    b. Set up a return visit so that Richard can discuss some of these occupations in more detail.

Key Concepts:

1. College or other post-high school schooling is not essential for self-development in the world of work.

2. Many aspects of an occupation, both those that are satisfying and those that are not, should be considered in formulating a set of career alternatives.

3. One must not lose track of one's own goals, hopes, or expectations in thinking about possible careers.

C. Episode Three: Sarah increases her self-awareness.

While Robin was undecided and Richard has forced himself into a two-alternative choice, Sarah seems to be a counselor's dream-come-true. Her family can afford to send her to college although her mother is not convinced she is "doctor material." She is an only child and her father wants the best for her so a big name college is a likely choice. Ms. Edwards should have no qualms about Sarah's conception of Sarah. Or should she?

"Great! What kind of a doctor or haven't you decided yet?"

"I'd like to be a pediatrician. Work with children."

"Gee, it's really wonderful that you're thinking so far ahead. I guess that will be helpful in planning what courses to take?"

"Yes. I'm taking geometry now. I'll take advanced algebra next year and trig and calculus in my senior year. I'm taking biology now and plan to take chemistry and physics before I graduate."

"Doing pretty well then?"

"Well, I'm not the best but I'm really working hard."

"Great. Have you planned to be a doctor for some time?"

> "Well, when I was younger, I wanted to be a teacher. Now I'm more interested in helping people. You know, keeping them from being sick."
>
> "What will being a doctor do for you?"
>
> "What do you mean?"
>
> "When I talk to a student who has such a clear idea of her future, I like to ask her to explore her idea in depth, to help her understand what the career she is choosing is like. Now, as a doctor you will be helping people. Will you be helping yourself too? Will you be doing the kinds of things you feel will help you to grow as a person?"
>
> "Helping people. I guess I'll be seeing how well I help people."
>
> "That's good. Do you think helping people will be enough?"
>
> "I don't know. I just feel that I want to do some good."
>
> "And I think that's great. All I'm worried about is that you know what being a pediatrician can do for you."
>
> "I guess I never thought about that."

Ms. Edwards is not trying to make Sarah change her mind about being a doctor. She is trying to get Sarah to use a different, very important perspective to think about why she wants to be a doctor. Sarah seems to have thought a good deal about working in a job in which she can help people. Apparently she has not, however, given much time to thinking about what she will gain by being a doctor.

> "A good thing for you to do, then, might be to evaluate yourself on some of these dimensions presented in The Career Data Book. Then we can talk some more about which aspects you can expect to be improving or refining as a doctor. If you have any trouble estimating your score on any items, just come down to the Career Center and we can arrange for you to take some relevant tests. Will this be too much for you to do?"
>
> "No, I think I'd like to know something about how I can help myself as a doctor. Oh, you know what I mean."
>
> "Sure. I'll see you later."

What Ms. Edwards has in mind is some exploration with the TALENT profiles. From talking with some of Sarah's teachers and with Sarah's mother, she knows that Sarah is a hard worker but also that she is having some problems in math and science. Perhaps Sarah's profile, drawn partly by Sarah on the basis of what she thinks she knows or can do and partly on the basis of some test scores, will point out some areas for exploration.

> "Hmmm, interesting profile."
>
> "Well, I'm kind of disappointed with it. Look, in all the important areas I'm lower than the high school kids who became doctors."
>
> "What are the important areas?"
>
> "Biology Interest, Vocabulary, Mathematics, English."
>
> "These are the important ones?"
>
> "Well, they are the ones with the highest scores."
>
> "That may mean that they are important but surely other areas are important too. Be sure you consider the profile drawn for people who said they were satisfied generally with this occupation. You may discover some additional areas. Your score in Public Service Interest is much higher than the average for these doctors. And look at the areas of Mechanical Reasoning, Social Service Interest, and Literature. It seems to me these would be important too."
>
> "Not to get into college. My mom says that math and English are really important subjects if you want to get into science."
>
> "They are important. But the fact that your scores aren't as high as the scores of these high school students doesn't mean that you can't go to college. It also doesn't mean that you can't be a doctor. Look at it this way. By working toward an M.D., you may be able to really improve your skills in these areas. However, you should also keep in mind that you are likely to be competing with people in this profession who were high on these skills in high school."
>
> "Then being a doctor does require that you know math and English really well."
>
> "Well, as a doctor you will be expected to know a good deal of math and English. But you're not a doctor yet. Sure you've got to start working on the subjects now, but working towards being a doctor will give you even more opportunities to improve your skills in these areas."

Ms. Edwards wants Sarah to realize that as a student working towards an M.D., she will be learning and thereby filling out her profile. In a sense, the TALENT profiles are being used to point out to Sarah those aspects of her profile she should begin to work on in high school as well as showing her that pursuing a career in medicine will give her more opportunities for improvements in these areas. Ms. Edwards is not trying to convince Sarah that a career in medicine is probably going to require more ability than she has. She is, however, using the TALENT profiles as a means of making Sarah aware of just what abilities, interests, and knowledge this kind of career requires.

> "Well, I'm not so sure now about being a doctor. I thought I'd just be helping people instead of learning math!"
>
> "And I'm sure you will. The point is that besides helping others you will be helping yourself too. So you need to consider if being a doctor will help you become what you want to be."
>
> "That's not so easy."

It certainly is not! But Ms. Edwards can help by suggesting that Sarah explore this career by looking into some community-provided opportunities. For example, the county clinic has openings for low-level medical technicians, and they might be willing to have Sarah work part time. In this sort of job she would be helping people to get better care as well as helping herself to greater concern for the taking and recording of measurements, writing of reports, and other important on-the-job uses of math and English. This is but one possibility. There are many others. Sarah might want to talk about doctoring with local women who are doctors, to "shadow" them. The local Air Force or Army Reserve medical units may be able to provide some information and on-the-job experience. Keep in mind, however, that important aspects of these exploratory activities were brought into focus by the TALENT materials. Ms. Edwards used the profiles to motivate Sarah's exploration of self in relation to her occupational goal; she was not trying to convince Sarah that being a doctor would be too much of a struggle. Maybe it will be. On the other hand, if she succeeds, Sarah will know why she is succeeding and what to expect for herself. And even if she fails, the vocational exploratory experiences in which she participates may provide her with new occupational alternatives. In any case, Sarah has learned how to use the TALENT materials both to broaden the range of her job choices and to evaluate them critically.

Episode Three Review

Problem: Sarah's ignorance of how an occupational choice can help her learn about herself.

Counselor's Approach:

1. Explore more carefully what Sarah wants from her stated occupational choice.
    a. Ask Sarah what being a doctor will "do for her."
    b. Have Sarah evaluate herself on the TALENT variables.
    c. Arrange for her to take some tests to help in this evaluation.
2. Help Sarah get a better understanding of the importance of a variety of job aspects.
    a. Examine both profiles presented for each occupation.
    b. Check what the TALENT participants report as satisfying and not satisfying aspects of their jobs.
3. Work with Sarah to identify and obtain relevant work experiences in her community.

Key Concepts:

1. Work experiences are important for development of self.
2. Career decisions should be made on the basis of one's exploration of self in relation to several occupational goals.

Section 4: The TALENT Profiles

A. Meeting the needs of career education

As noted earlier, these TALENT profiles are based on the 11-year follow-up data collected from TALENT participants who were in the 11th and 12th grades in 1960. One may therefore ask why TALENT did not wait until 1976 to present profiles based on data from all four grades. Three answers are:

(1) The TALENT staff is committed to making information that is relevant to vocational guidance available as soon as it is possible and worthwhile to do so. From the beginning, Project TALENT was intended as a resource to be used by persons in the field of career development. This publication is especially intended as a supplement for counselors and others who are familiar with The Career Data Book and who wish to use profiles with a greater validity in their career guidance programs. These 11-year profiles and the 5-year profiles in The Career Data Book will also be of interest to sociologists and educational researchers concerned with problems of comparison of people in different occupations. Two important additions to the data presented in the original book are (a) the inclusion in the profiles of information on job satisfaction (measured on several dimensions) and (b) the inclusion of a profile of those people within each occupation who have a high level of overall job satisfaction.

(2) Many vocational guidance experts have stressed both the importance of and need for clearly written, comprehensive materials concerned with occupation and person-in-occupation characteristics. Super (1964) emphasized the special relevance of these materials for the student's translation of his or her self-concept into occupational terms. He wrote, "Awareness of the fact that one has attributes which are said to be important in a certain field may lead one to look into that occupation; and the investigation may lead to confirmation of the idea that the role expectations of that occupation are such that one would do well in it and enjoy it" (p. 13). Unfortunately, not all career guidance materials are presented in a useful and understandable format. Louise Vetter (1974) of Ohio State University, for example, has suggested that "use of some forms of career information can be more of a problem than a solution, given the current status of the materials available" (p. 27). She recommended:

> To accurately reflect the reality existent in today's world may not be enough, however. Career information, at its best, would present emerging patterns existing within today's society as students are preparing for tomorrow's world, not today's. The career options available for both men and women, for both majority and minority groups, should be open-ended, not limiting. (p. 27)

Leonard Lecht (1974), in his review and evaluation of vocational educational policies and plans in the 1970's, also has emphasized the need for improvements in data-reporting and dissemination methods. And Jean Pierre Jordaan (1974) has noted the importance of career information being both accessible to and understandable by students. In summarizing the need for guided exploration, he wrote:

> It is clear . . . that on a number of counts many if not most eighteen-year-olds are poorly prepared to find and make a place for themselves in the labor market. The persistence of inappropriate and unrealistic aspirations is striking, as is the fact that job and position changes between the ages of eighteen and twenty-five generally do not result in a job which is more in keeping with the individual's interests and abilities than previously held jobs. One of the reasons why high school students have problems when they leave school and enter "the real world" appears to be that they do not know themselves and the world of work sufficiently well to make good decisions and plans. (p. 287)

Jordaan, however, does not merely want more materials, but materials that may be used to promote and further students' exploration of themselves in relation to work. He noted that "ways need to be found to get pupils to do their exploring and reality testing while they are still in school and can be helped to plan, obtain, and derive maximum benefit from carefully selected exploratory experiences" (p. 286).

A different point of view, one which is no less in favor of the development of comprehensive vocational materials and getting them into the schools where they are needed, is expressed by John Holland (1974). He wrote:

> If all goes well, vocational counseling will eventually be used only for a few unusual clients, and a variety of printed and audio-visual materials, workbooks, books, and a few group activities arranged in some systematic way will dominate. Somewhat later, computers may be helpful. A few psychologists will give demonstrations at conventions to illustrate how vocational counseling used to be done,

> but eventually they will be shunted off to hobby fairs along with bookbinding and calligraphy. (p. 26)

But no matter the direction, these comments all seem to make the same basic assumption: Information that is based on the best available data and presented in a clear-cut, understandable manner is necessary for successful career planning. And, while there are differences of opinion as to how these materials are to be used and to whom they should be addressed, there would certainly be no disagreement regarding the fact that such materials should be introduced into the schools as soon as they are available.

(3) In a report entitled, Converting Test Data to Counseling Information, Dale Prediger (1971) noted that similarity scores and success estimates can provide the counselor with information that is crucial for stimulating and facilitating vocational exploratory behavior. By "similarity scores" Prediger meant the degrees of similarity between the individual (or the individual's test scores) and those individuals pursuing a particular career (the criterion group) on various dimensions. "Success estimates," for Prediger, referred to estimates of how likely an individual will be to achieve certain occupation-oriented rewards. These findings bring out clearly the importance of the profiles presented in this publication. These 11-year profiles provide the counselor with a way of assessing similarities between the student and workers in the job which takes into account what rewards (or satisfactions) the career may offer. Because reports of job satisfaction by TALENT participants in the 11-year follow-up have been included on each profile, and because each profile indicates the high school characteristics of workers in the career who report a high level of overall job satisfaction, it is possible for the counselor working with this publication to use Prediger's "two-stage" strategy for career exploration. Counselors and students are able to see what chemists, librarians, and bookkeepers say they like about their jobs and how their 1960 characteristics are related to their overall job satisfaction. Knowing some of the sources of satisfaction the career offers will help the student in deciding whether he or she can succeed or realize personal values in the career. Likewise, knowing what psychologists, for example, were like in high school should help the student to assess more clearly and meaningfully those areas in which he or she is likely to improve if a career in psychology is pursued.

At a time when job market trends are of much concern, vocational guidance materials like these 11-year TALENT profiles become even more important. Today, more and more people are having to look for work in a variety of areas because of the changing patterns of manpower needs. It is crucial that they be able to consider carefully and evaluate critically all available career possibilities. S. Norman Feingold (1974), National Director of B'nai B'rith Career and Counseling Services, discussed this need at a recent conference. He said:

> In the past, we heartily approved of the employee who remained in one job all his lifetime. Today, however, one looks more favorably on the person who has filled many jobs and moved up the promotional ladder. Education must be relevant. Up to now, we have seen far too many bright youth drop out or stop-out of school because they felt their education did not adequately prepare them for the world of work. Career education and career guidance are new thrusts that may put relevance back into education. (pp. 1 & 2)

Dr. Feingold also made some very interesting observations about what career possibilities may exist ten years from now. He said:

> The makeup of the labor market is changing. Farm employment will continue to decline, causing our society to pass further from agricultural to non-agricultural employment. The most rapid growth is occurring in services . . . . Government employment at the local, state and national levels has become one of the fastest growing industries. We may expect further increases in this area. Nearly all of the future growth is expected in state and local governments resulting from the increased need for public health, education, sanitation, welfare and similar services.
>
> Construction work is expected to rise more slowly than average by 1985. A rapid rise in finance, insurance and real estate is expected in both banking and insurance.
>
> The rise of employment in trade will result from a rapidly growing population, a higher standard of living, and a greater number of people employed part time, especially women in supermarkets, grocery stores, etc. in suburbs. Manufacturing is expected to grow slightly. It appears that most of the increase will be in durable goods. In transportation and public utilities, there will be divergent trends. Air transportation and motor freight are expected to rise while railroad employment will continue to decline. (pp. 6 & 7)

Finally, Dr. Feingold made an observation that more than adequately characterizes the feeling of the TALENT staff. He said:

> People can make a contribution to themselves, their family and society if we provide them with widening educational and career opportunities. (p. 7)

B. Structure and content

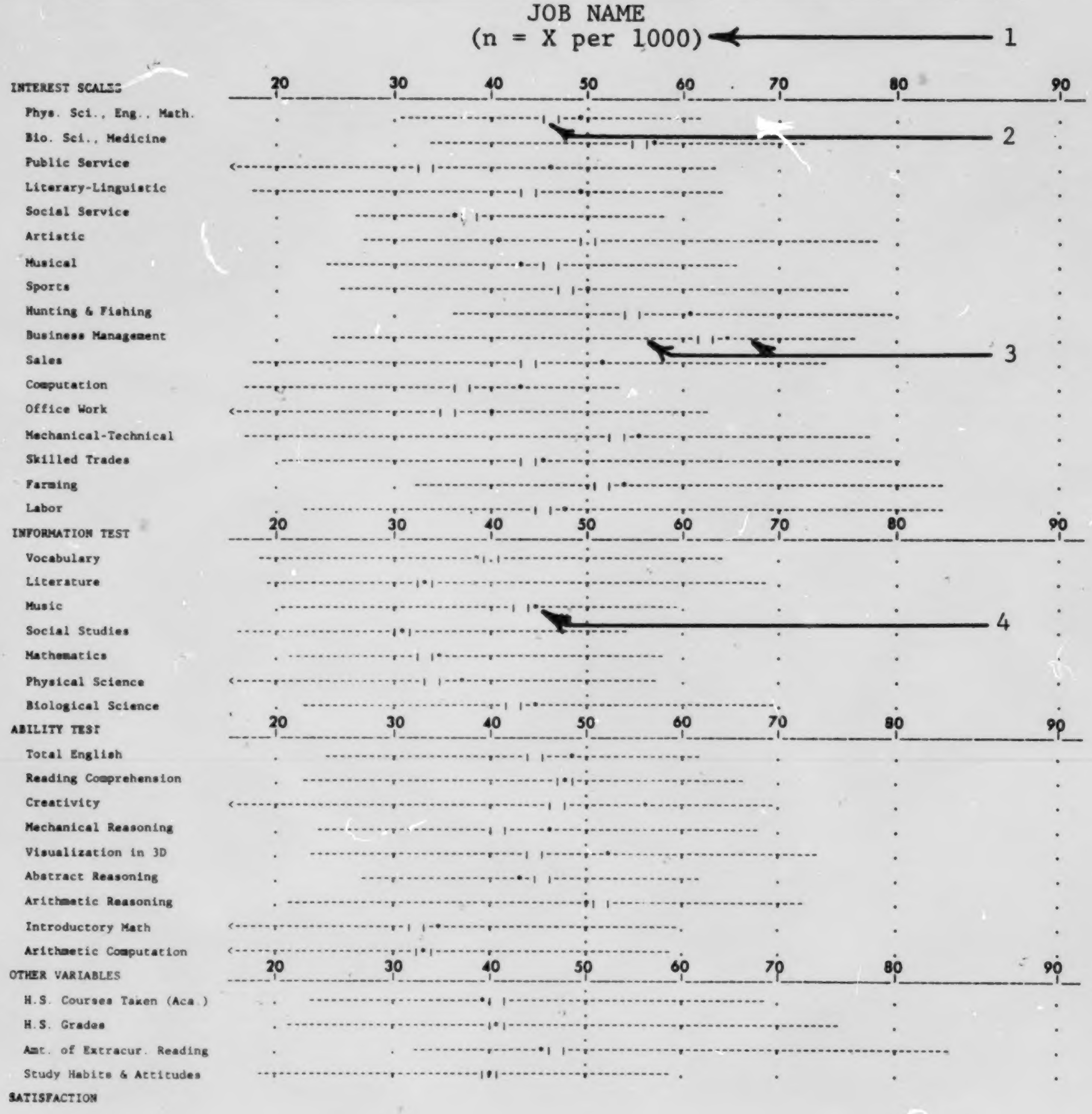
The profiles in the following section present data on the interests, information, and abilities, as measured in 1960, of TALENT participants who are employed in various occupations 11 years after high school. The profiles for a given occupation are based on data from both sexes. In this respect they differ from the 5-year profiles published in The Career Data Book, which were based on the sex that had the greater number of people in a given occupation. They also differ from the 5-year profiles in that they have been calculated from data of people currently employed in an occupation, while the 5-year profiles were calculated from data of people planning to enter an occupation. Another difference between the sets of profiles is that the 11-year profiles only make use of data from grades 11 and 12, since 9th- and 10th-grade 11-year data were not yet available at the time of this report. Finally, the profiles presented here weight each respondent according to the number of people in the population that he or she represents, whereas in The Career Data Book all respondents were weighted equally.

The profiles include all but one of the scales used in the 5-year profiles. Socioeconomic background was eliminated because it was felt that this information, while descriptive of existing relationships between occupation and socioeconomic background, might be used to perpetuate negative predictions such as "Poor people can't become doctors." In other words, these 11-year data reflect "what is" and not necessarily "what should be." This reasoning was also an important factor in the decision to present profiles utilizing data from both male and female respondents for each occupation.

Each profile includes data on two groups: all people in a given occupation at the time of the 11-year follow-up, and those people in it who are most satisfied with their work. The "most satisfied" group consists of people who responded, "Yes, I enjoy it very much," or "Yes, I like it very much most of the time," to the question, "Do you enjoy the kind of work you have done on this job?" For both groups, the profile compares their scores to the scores of the population as a whole.

The physical appearance of the profiles is similar to the condensed example presented in Table 1. The discussion that follows is keyed to it.

TABLE 1



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Interesting Work
Challenging Work
How Well I Can Do the Work 5

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Relationship of Work to Prior Training
Job Security

(* based on 56% of individuals in occupation) 6

1. "n = X per 1000" indicates how many people per 1000 of the total population represented by Project TALENT were in this particular occupation 11 years after high school.

2. For each scale the percentile corresponding to the median score for all people in the occupation is indicated by a gap in the line (--| |--).

3. For each scale the spread of the middle 50% of scores for all people in the occupation is shown by the length and position of the dotted line. The left end of the line marks the 25th percentile, that is, one-fourth of the people in the occupation had scores below this point. Similarly, the right end of the line marks the 75th percentile. An arrow (<-- or -->) indicates that the middle 50% of scores for a particular scale includes values that were either below about the 17th percentile of the population as a whole or above about the 93rd percentile, respectively. (Occasionally a scale is so consistent within an occupation that the entire middle 50% is very close to the median, so all that shows for the scale is | |.)

4. For each scale the median score for people within the occupation who are most satisfied with the work is marked by an asterisk (*). Differences between the asterisks and the overall medians indicate scales that are differentially related to job entry and satisfaction. For example, if the (*) is far to the right of the median (| |), the interpretation is that for people in the occupation, a high score is very important for satisfaction.

5. The satisfying and not satisfying aspects of the occupation presented at the bottom of the profile were chosen from a list of 16 job aspects that each person had been asked to rate. No aspect was considered for presentation unless the group as a whole marked it as being at least somewhat important. Up to three items are listed in each of the two categories (satisfying and not satisfying), and in both cases the order goes from most extreme reaction to the least extreme reaction. In this example, "Income to Start" was a more actively unsatisfying part of the job than "Job Security."

6. The percentage of individuals within the occupation who were highly satisfied with it is given for two reasons: it indicates the proportion of the people in the occupation who really enjoy the work; and it can also be used in conjunction with the "n = X per 1000" to estimate the size of the satisfied group in absolute terms.

C. Technical data

Since the profiles are based on the 11-year follow-up data for the high school classes of 1960 and 1961 only, the total number of cases is considerably smaller than it was for the 5-year profiles--approximately 50,000 people in the present analysis. Some occupations were omitted because they had so few people in them; others containing only a small number of cases were combined. Combination in these instances was guided by two criteria: occupational profiles had to be similar to the profile for the career group into which the occupation was placed, and occupations had to have similar training requirements. Most of the occupations presented in this supplement, then, contain at least 100 people from the two grades.

Whenever an occupation profile is based on a grouping of similar jobs, the components of the grouping are listed in parentheses beneath the main title that has been assigned to the general profile. The sub-occupations are listed in descending order, that is, the occupation with the largest number of people in it is listed first. Percentages of the total number of persons represented by the occupation profile for each component are also listed. For this study, the data base of each profile is made up of the weighted responses of the TALENT participants. These weights, which are described in greater detail in The Project TALENT Data Bank: A Handbook (1972, pp. 10-12), take into account those TALENT participants who did not respond to the 11-year questionnaire.

The process of developing and printing these 11-year profiles was done mostly by computer and proceeded as follows:

(1) Each subject's scores on the 38 profile variables were converted to percentile scores using separate norms for each grade and sex. That is, each subject's score was compared only to those in his own grade and sex. The intent of comparison with one's own sex was to reduce the possibility of sex bias in interpretation.

(2) Weighted frequency distributions of the percentile scores for the respondents in each occupation were computed and the median and quartile points were determined. Some of the respondents (those in a special sample of subjects who did not return mailed questionnaires) represented a larger number of people in the original population and so had very large weights.

For a few occupations such a large portion of the total weight was accounted for by a few individuals that the resultant scores were somewhat unreliable. In many of these cases a procedure utilizing information about differences between these special and regular respondents in the general population was able to increase the reliability of the scores to an acceptable level.[2] The procedure was based on the assumption that differences between regular and special sample respondents would be the same in all occupations, except for random variations. This assumption was tested for a particularly vulnerable score--reading comprehension--and found to be quite well satisfied. Specifically, when the effective sample size for an occupation was less than 40, the following procedure was used to compute the profile scores. Instead of adding together the (many, low weighted) regular respondents' scores in the occupation and the (few, high weighted) special sample respondents' scores in the occupation, part of the weight assigned to each special sample respondent's score was assigned to a more stable estimate of his/her score. The more stable estimate was the sum of (1) the mean score for regular respondents in the occupation and (2) the average (over all occupations) difference between the scores of special sample respondents and regular respondents.

As a result of the application of the correction, each median presented has stability at least as great as would be obtained with a sample of 40 in the occupation, with the exceptions of Market Analyst (effective n=38), Teacher: High School Home Economics (effective n=37), Conservation Specialist (maximum effective n=38), City Planner (effective n=36), and Medical Specialist (maximum effective n=38).

(3) The medians for those highly satisfied with their jobs were computed as described above except that the frequency distributions were based on cases in the "satisfied" group that was described earlier.

(4) The satisfaction with various aspects of their jobs was calculated as described above, with the mean rating for each of the 16 items being based only on responses of people who considered that item to be at least moderately important.

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[2] The authors wish to thank John C. Flanagan and John W. Tukey for their advice on this problem. However, the authors take full responsibility for the final results of the correction procedure.

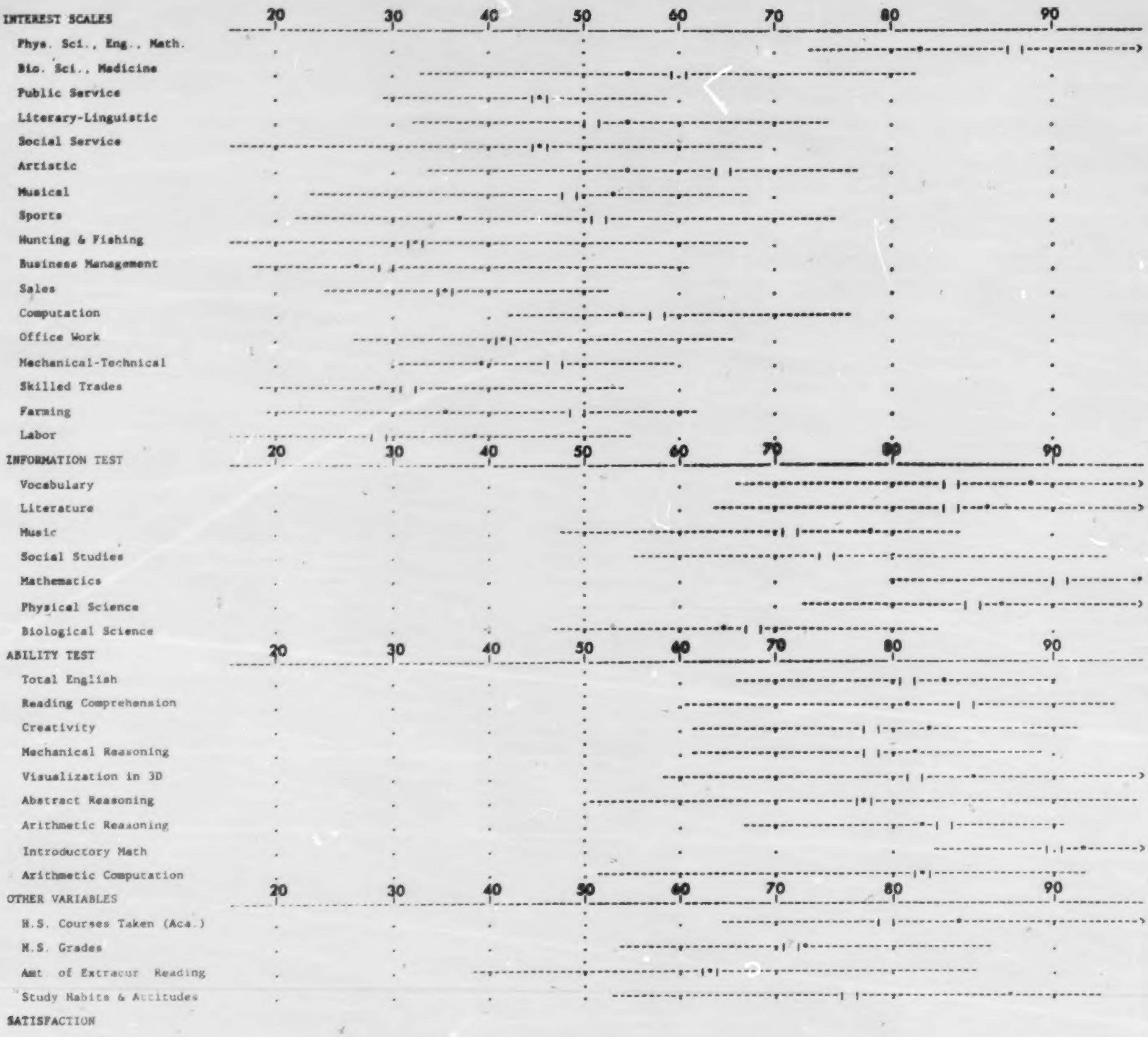
(5) Finally, the profiles were drawn by computer (at a high resolution of less than one percentile point per column) and photo-reduced to fit an 8½" x 11" format.

CAREER GROUP 1

ENGINEERING, PHYSICAL SCIENCE, MATHEMATICS, AND ARCHITECTURE

AERONAUTICAL ENGINEER

(n < 1 per 1000)



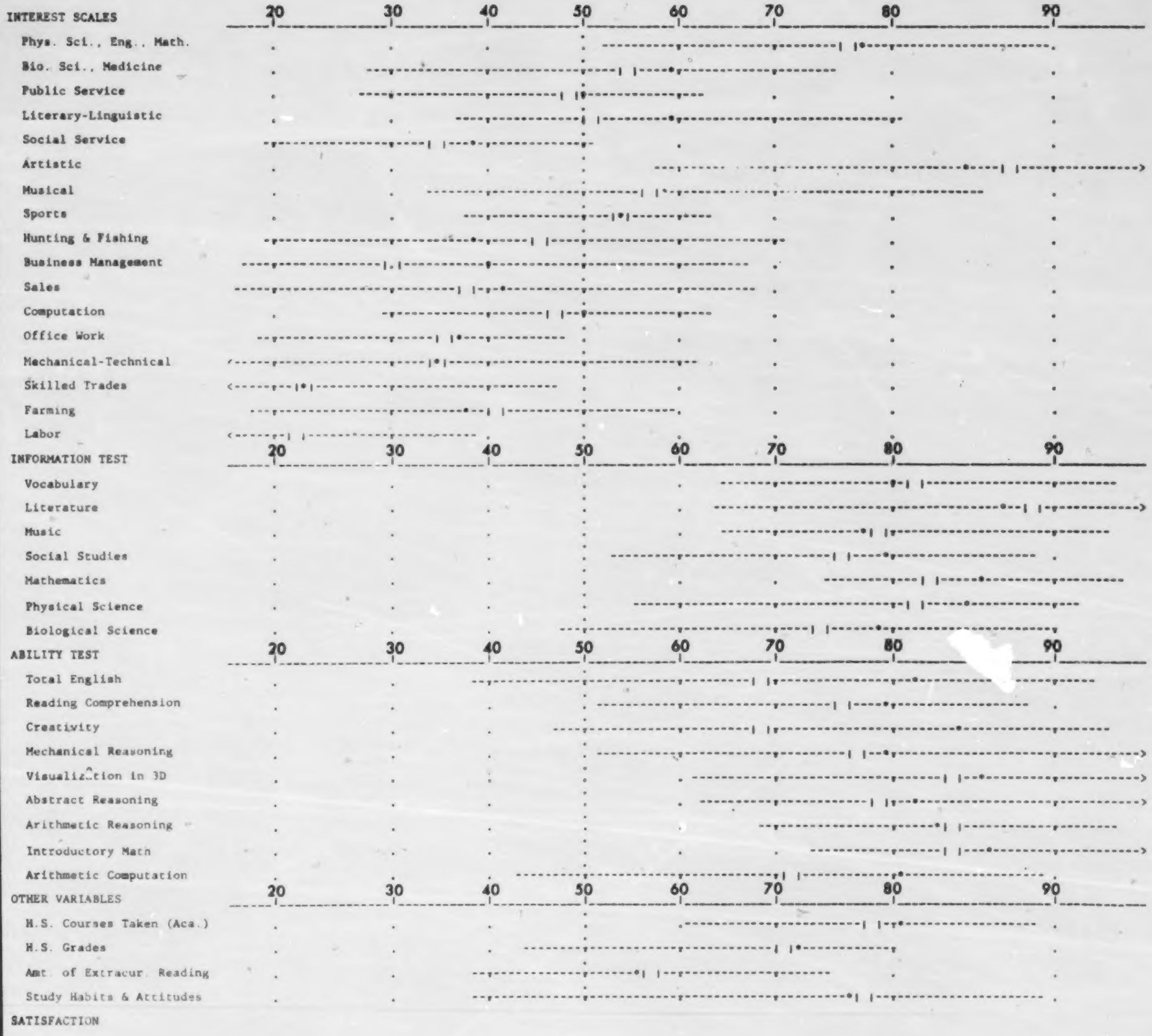
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Income to Start

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Job Security
Length of Vacations
Opportunity to Advance

(* based on [illegible] of individuals in occupation)

ARCHITECT

(n = 1 per 1000)



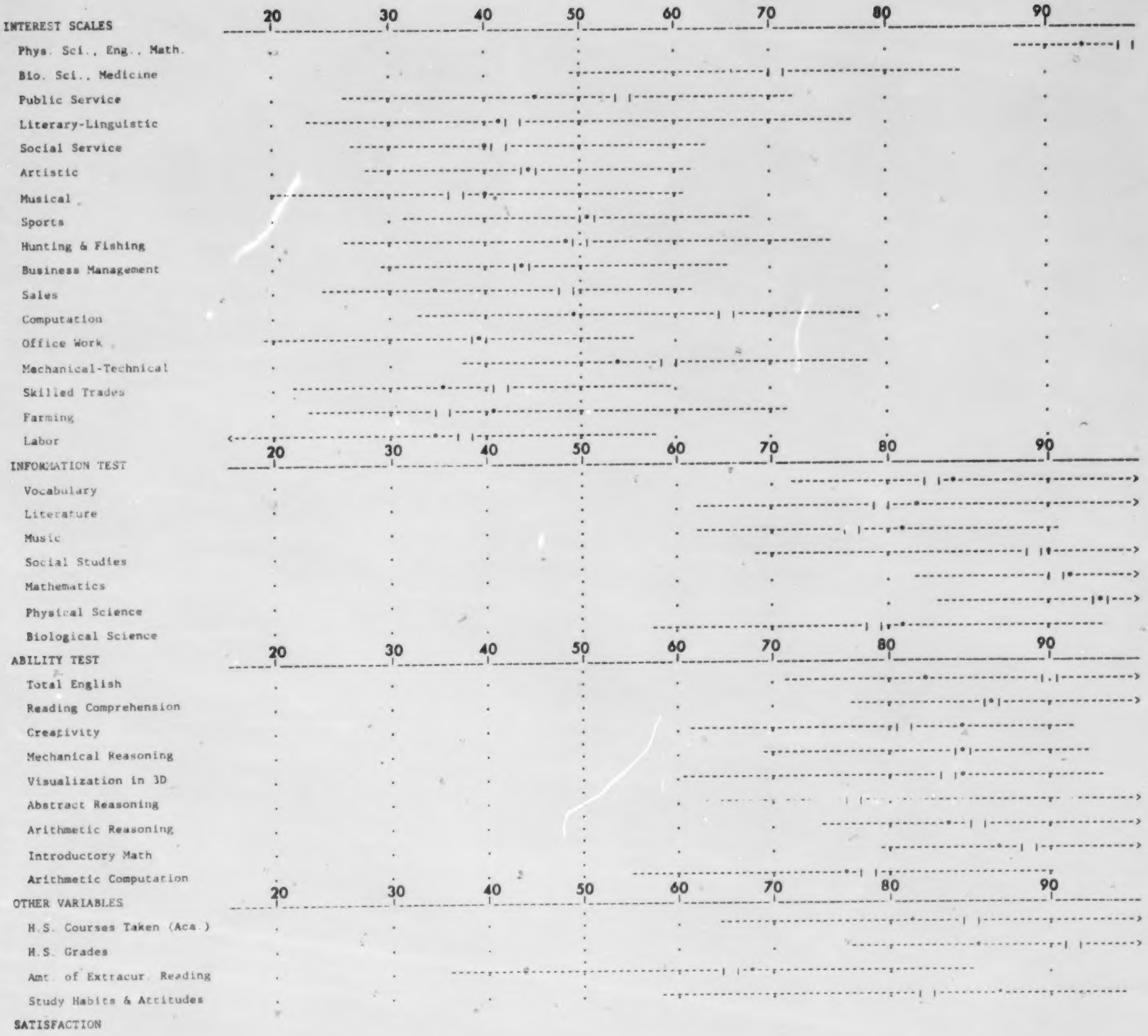
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Income Expected

(* based on 75% of individuals in occupation)

CHEMICAL ENGINEER

(n < 1 per 1000)



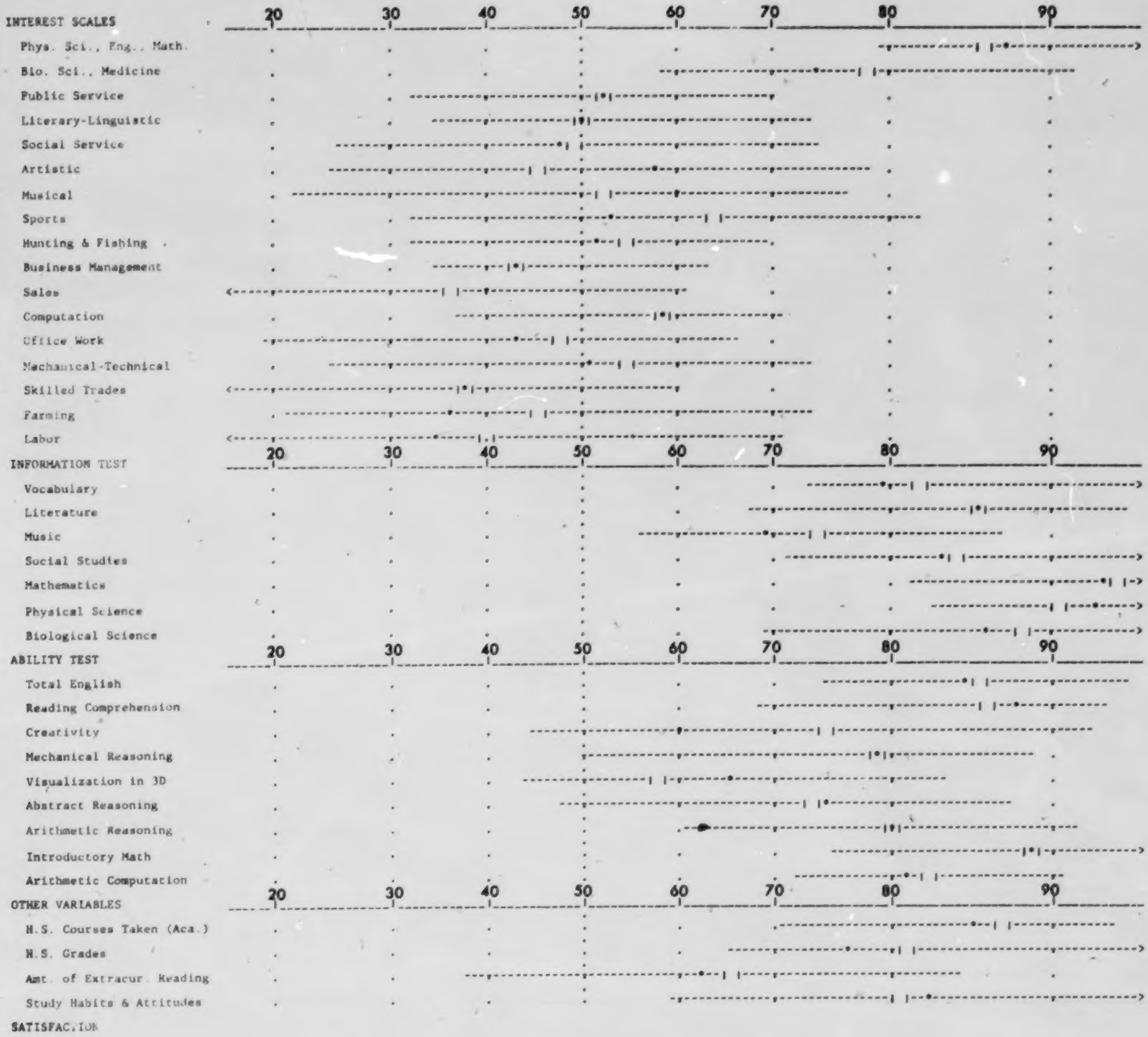
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Quality of Surroundings

(* based on 54% of individuals in occupation)

CHEMIST

(n = 1 per 1000)



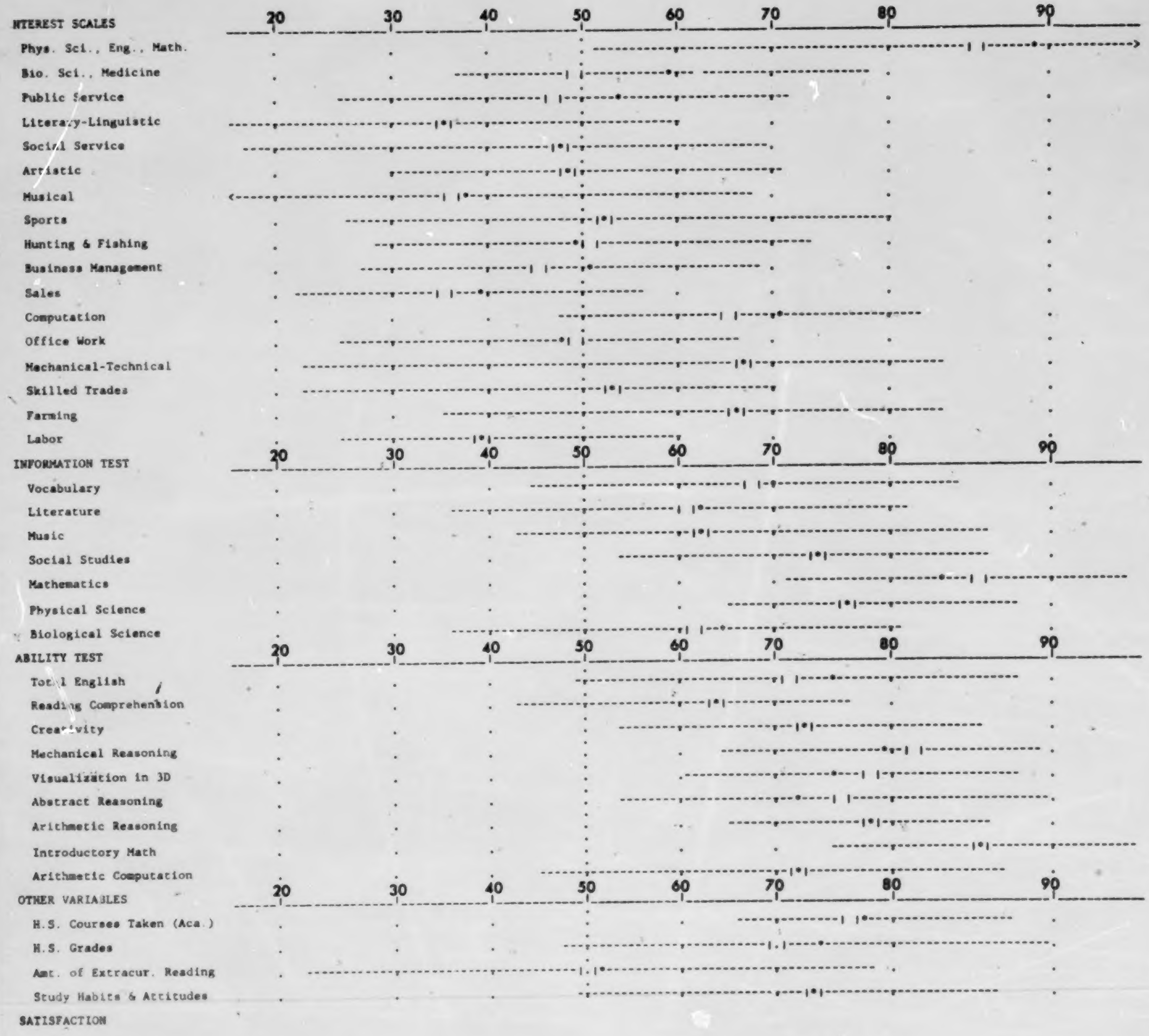
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Status

(* based on 63% of individuals in occupation)

CIVIL/HYDRAULIC ENGINEER

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Importance of Work
Job Security
Relationship of Work to Prior Training

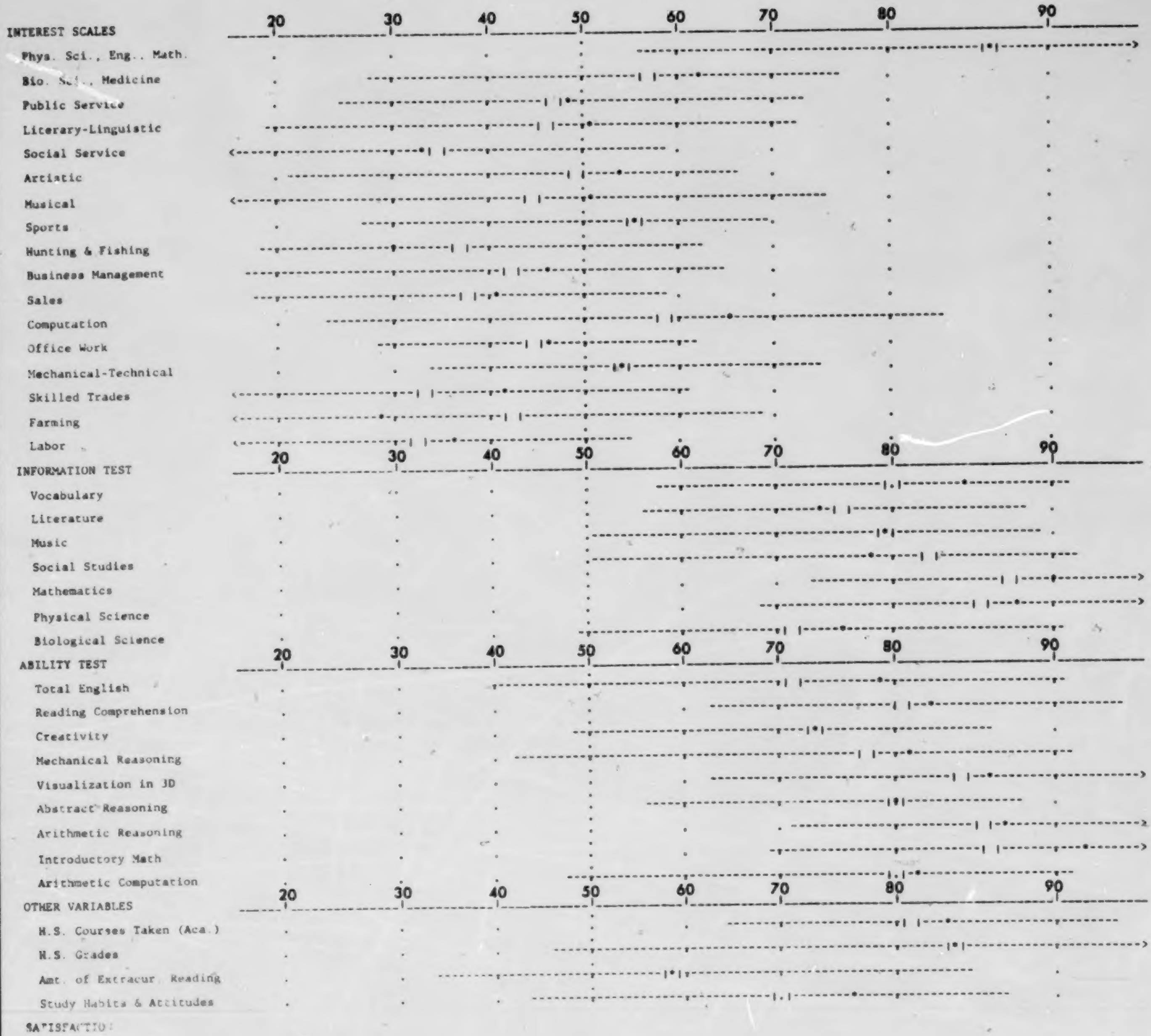
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Quality of Surroundings
Opportunity to Advance

(* based on 70% of individuals in occupation)

COMPUTER SPECIALIST/ENGINEER

(n < 1 per 1000)



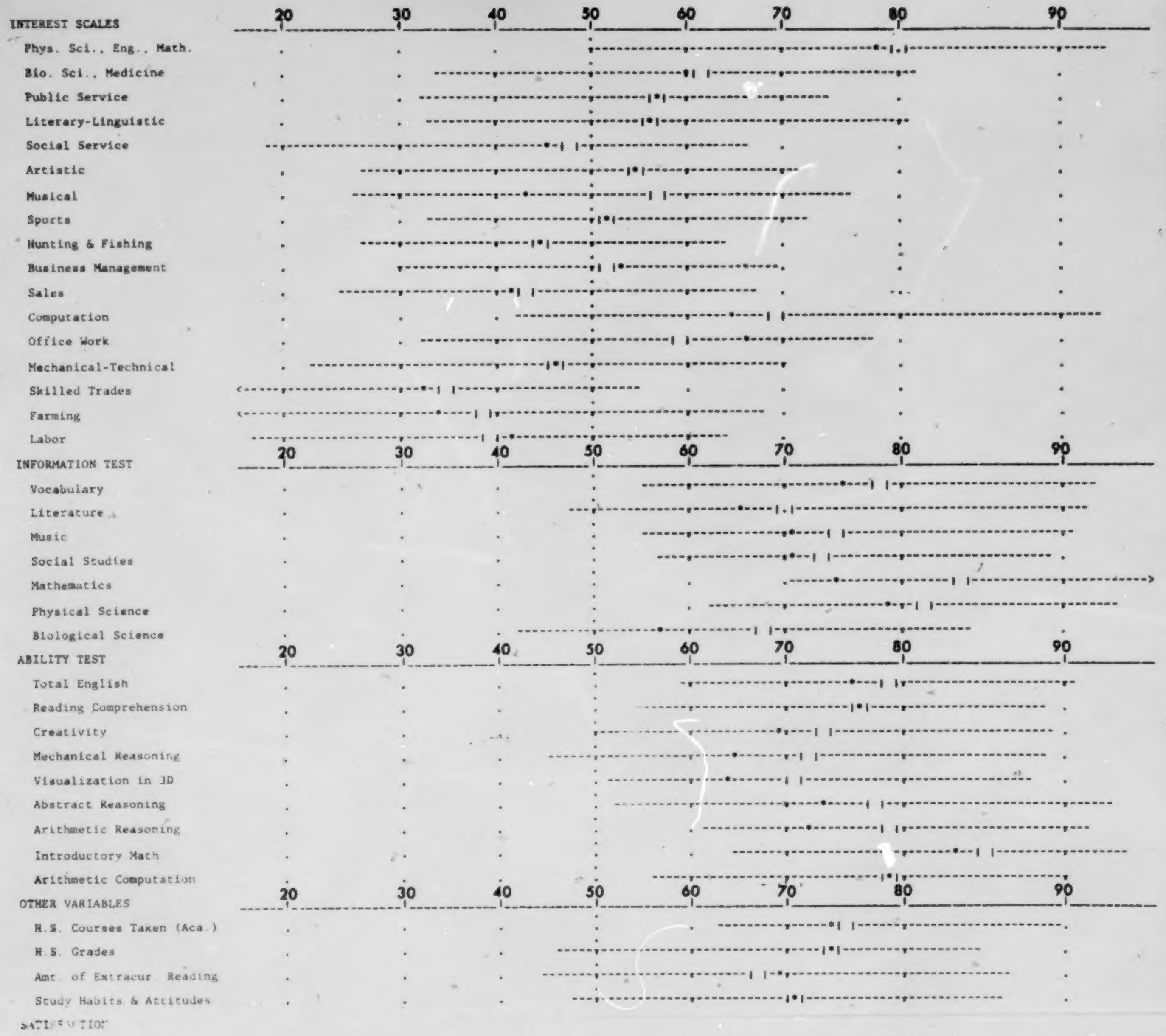
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
- How Well I Can Do the Work
- Interesting Work
- Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
- Quality of Surroundings
- Opportunity to Advance
- Income to Start

(* based on 65% of individuals in occupation)

COMPUTER SYSTEMS ANALYST

(n = 5 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Job Security
Interesting Work

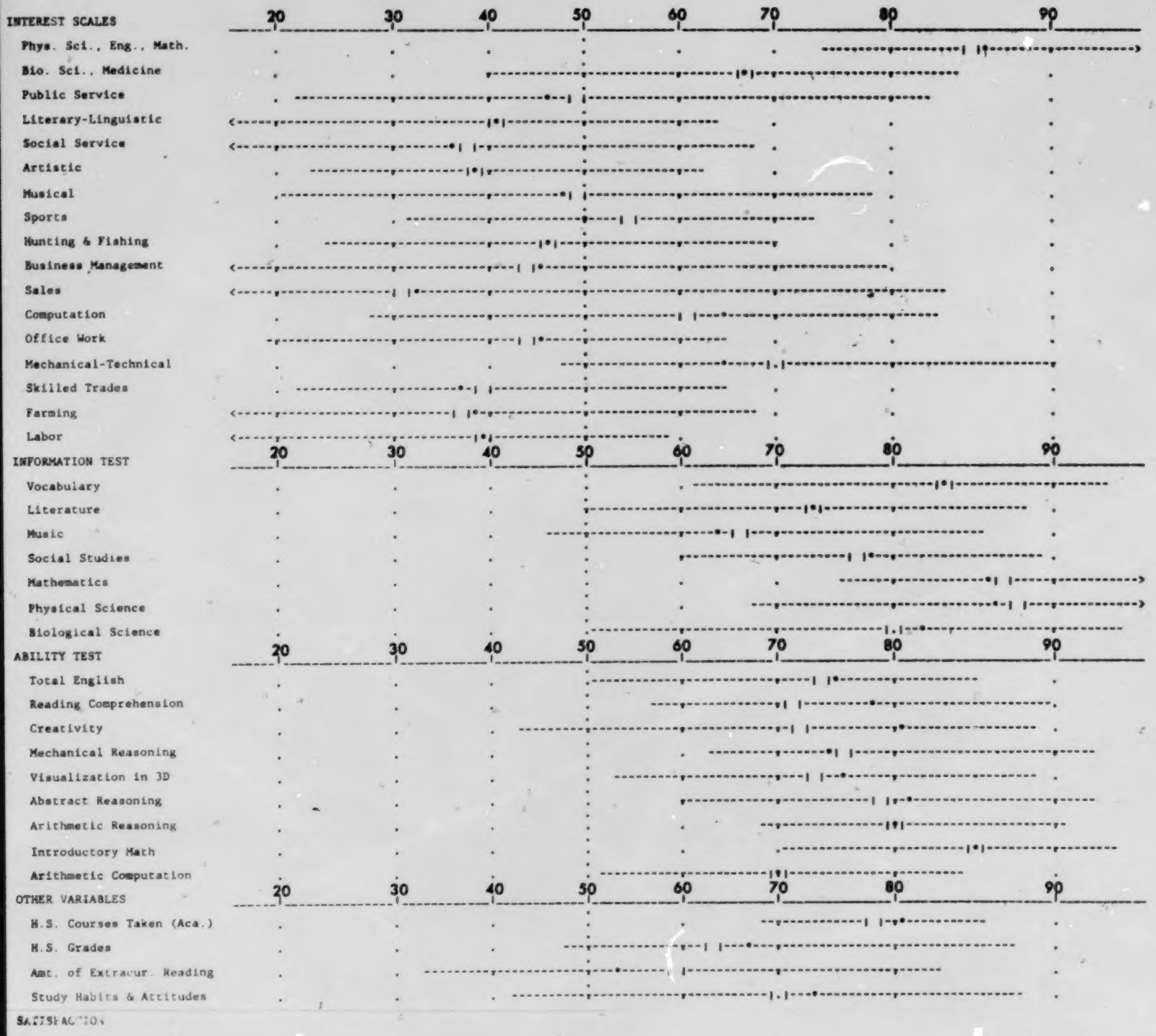
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Quality of Surroundings
Income to Start

(* based on 85% of individuals in occupation)

ELECTRICAL/ELECTRONIC ENGINEER

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
Friendliness of Co-workers
Importance of Work

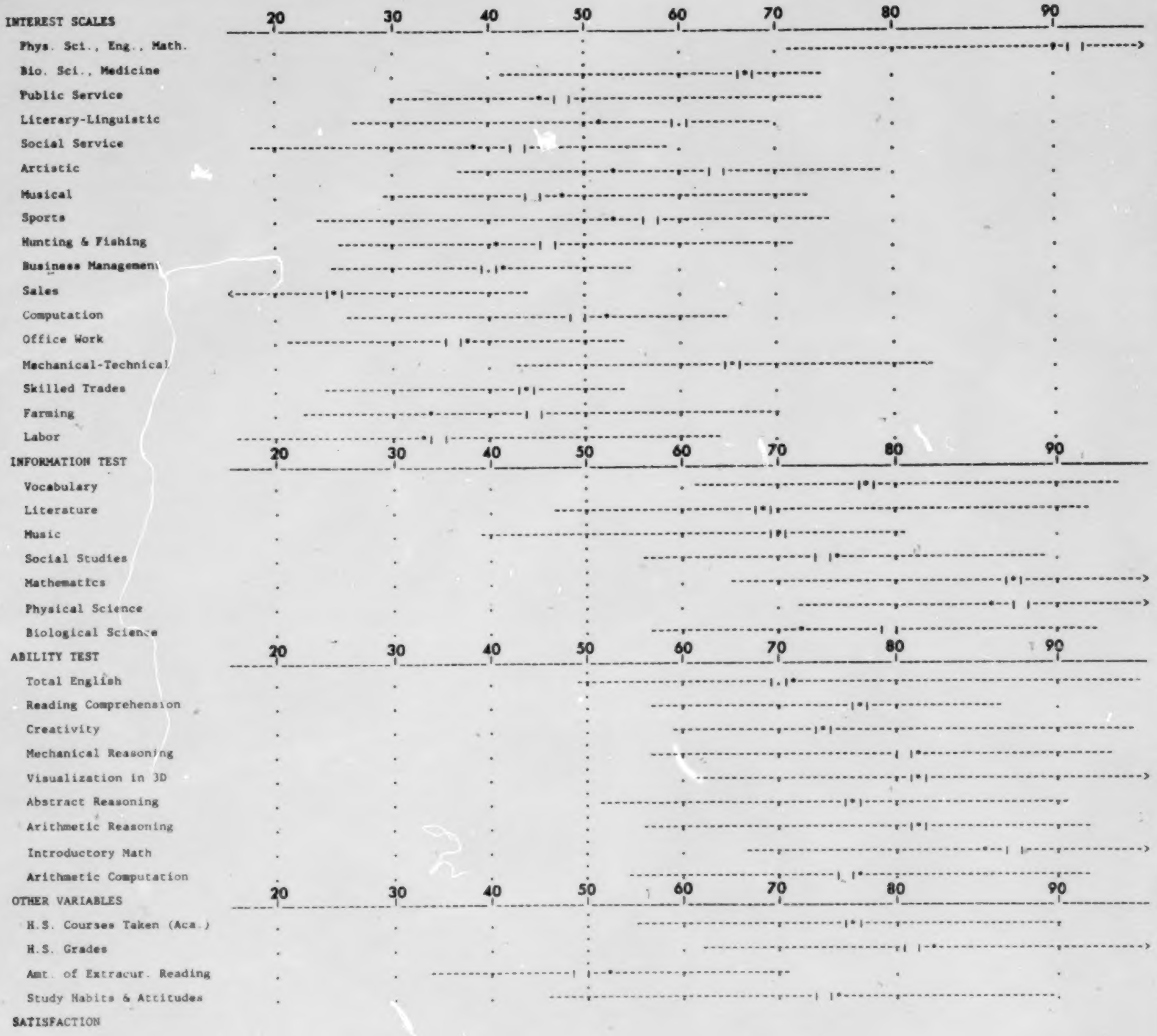
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Opportunity to Advance
Quality of Surroundings

(* based on 61% of individuals in occupation)

MECHANICAL/AUTOMOTIVE ENGINEER

(n = 2 per 1000)



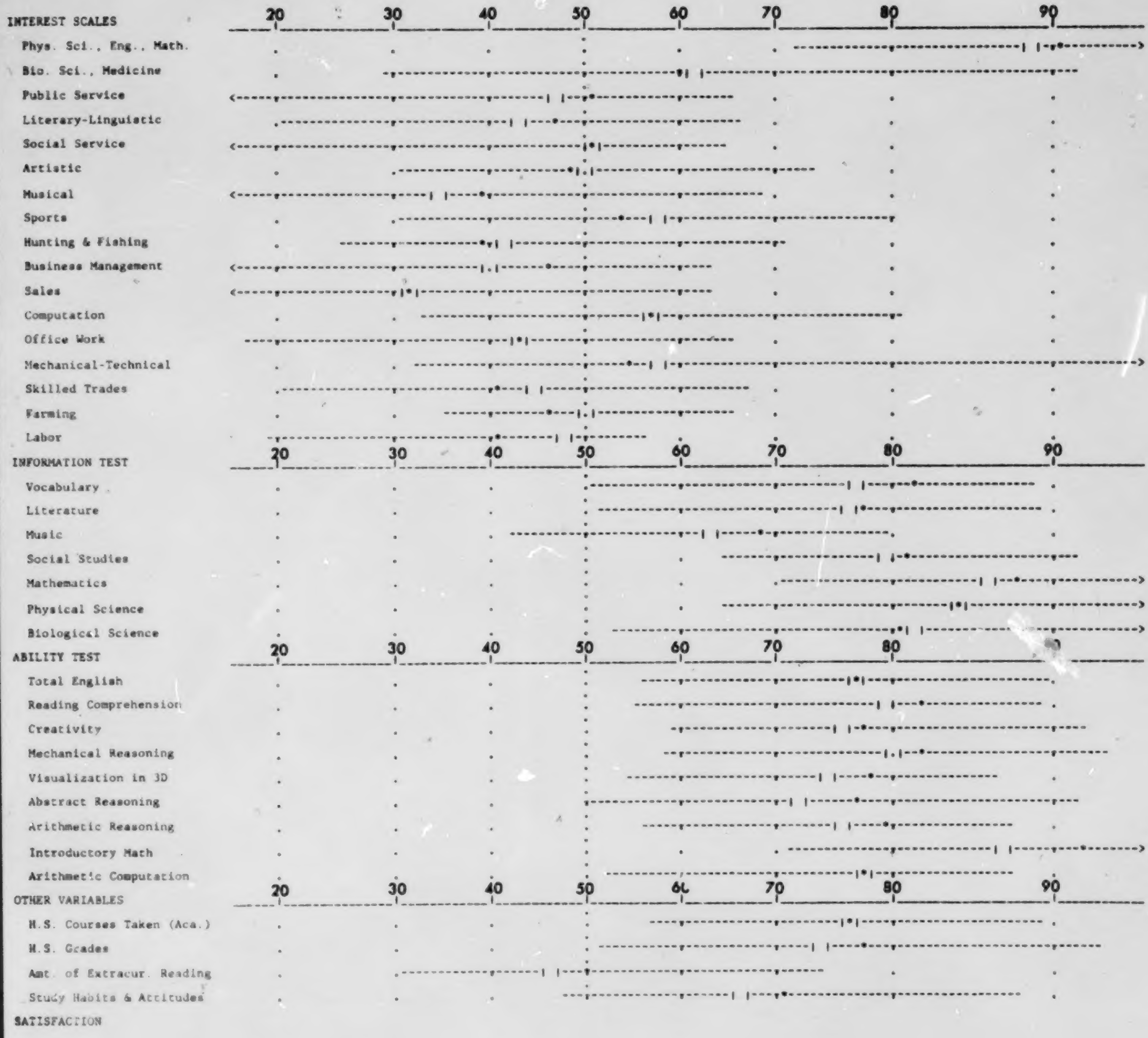
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Challenging Work
Income to Start

(* based on 71% of individuals in occupation)

MINING/PETROLEUM/METALLURGICAL ENGINEER, ENGINEERING MANAGER

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Job Security

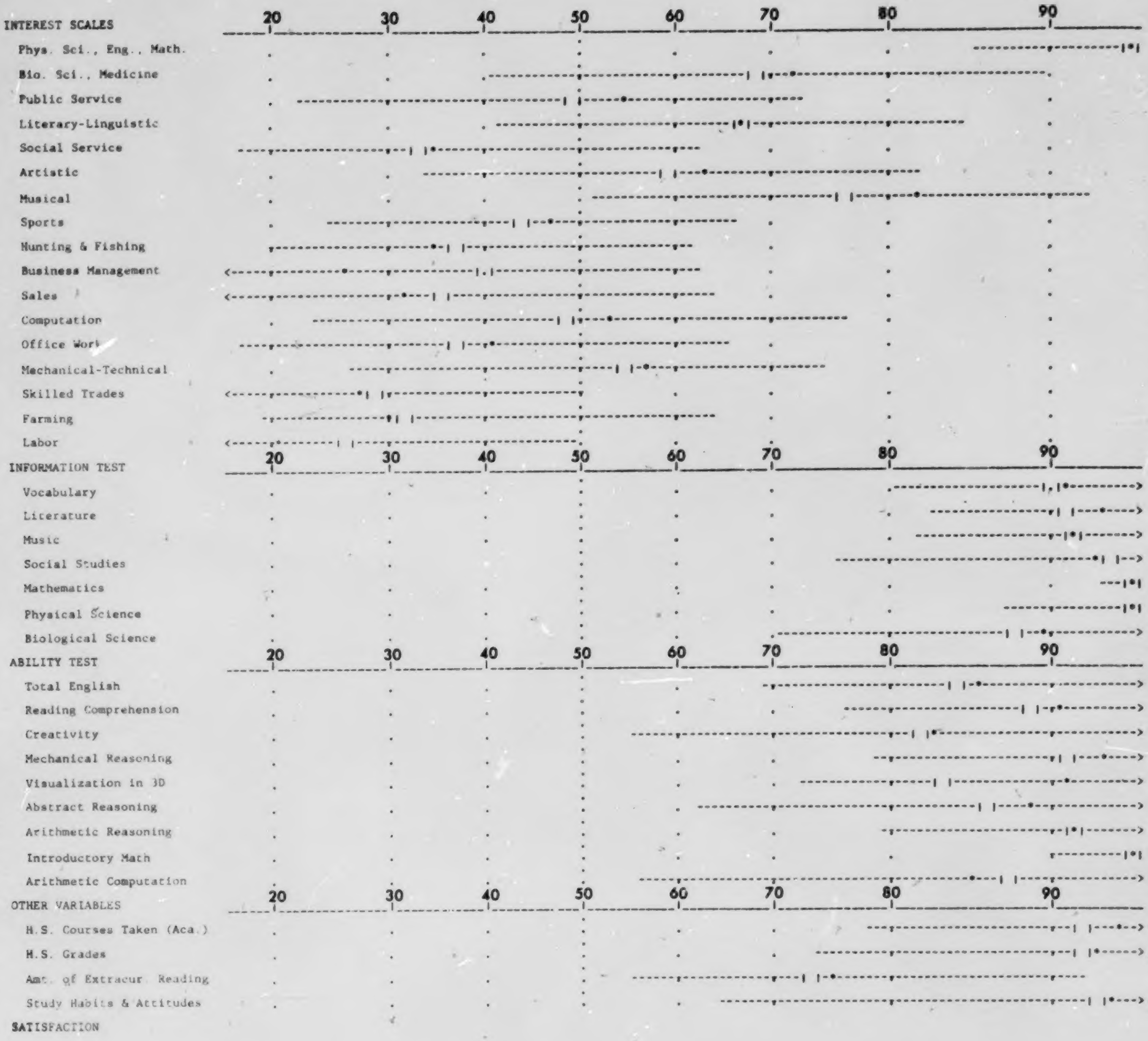
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Quality of Surroundings
Relationship of Work to Prior Training

(* based on 61% of individuals in occupation)

PHYSICIST

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Relationship of Work to Prior Training
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

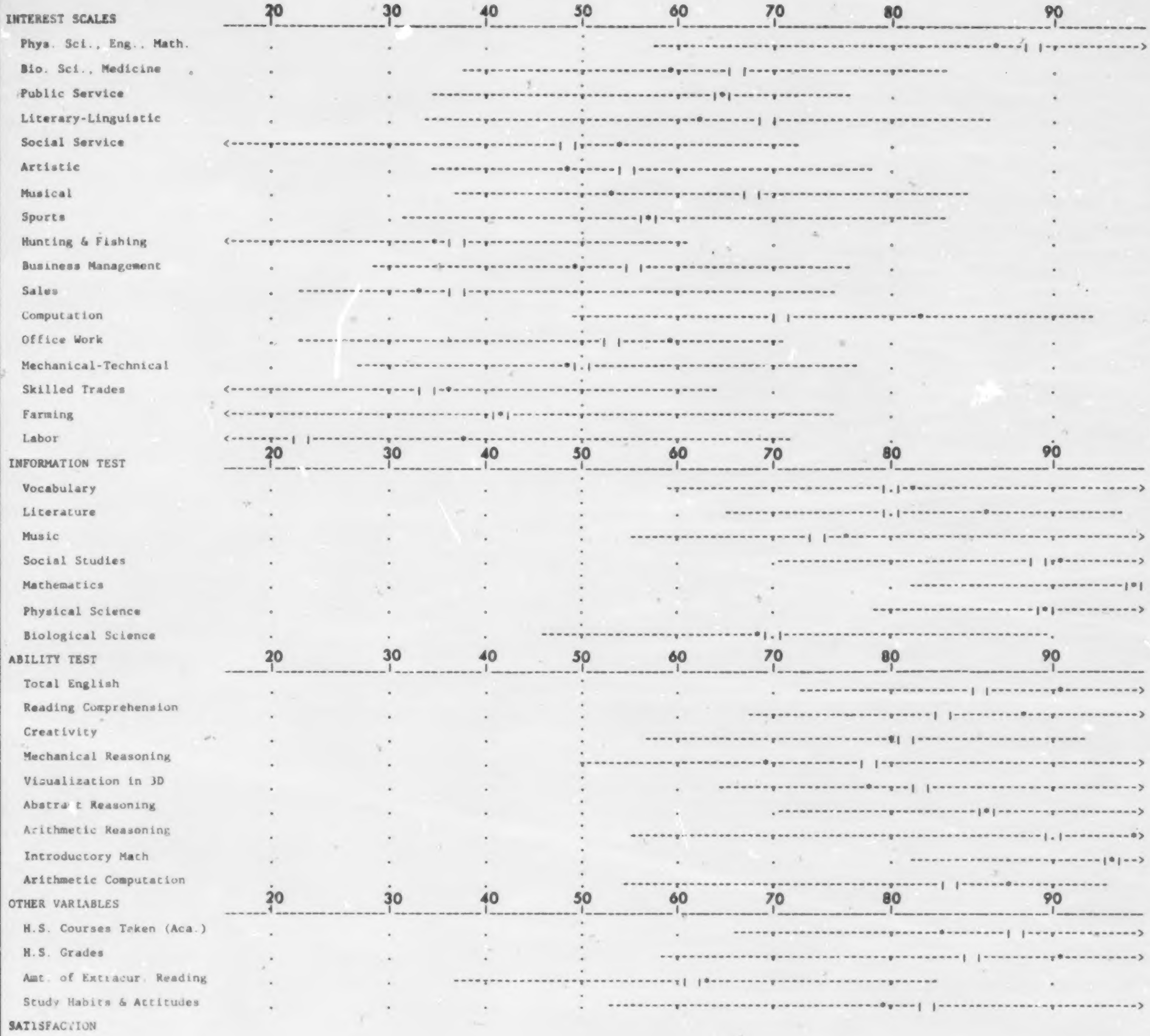
Opportunity to Advance
Job Security
Income Expected

(* based on 58% of individuals in occupation)

STATISTICIAN, MATHEMATICIAN

(Statistician (73%), Mathematician (27%))

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Job Security
How Well I Can Do the Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

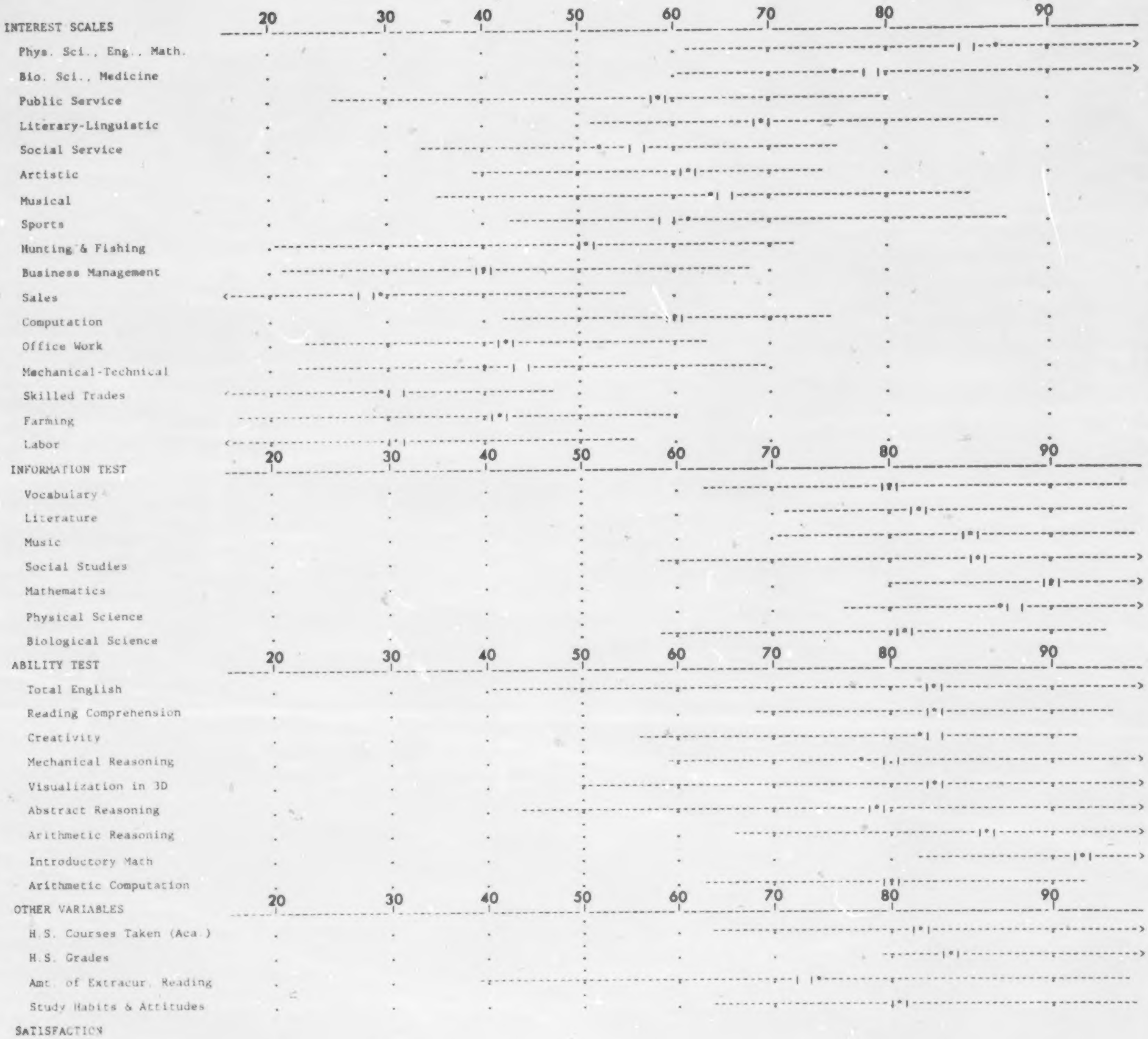
Opportunity to Advance
Status
Length of Work Week

(* based on 68% of individuals in occupation)

TEACHER: COLLEGE SCIENCE/MATHEMATICS

(Teacher: College Science (74%), Teacher: College Mathematics (26%))

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Income Expected
Opportunity to Advance

(* based on 94% of individuals in occupation)

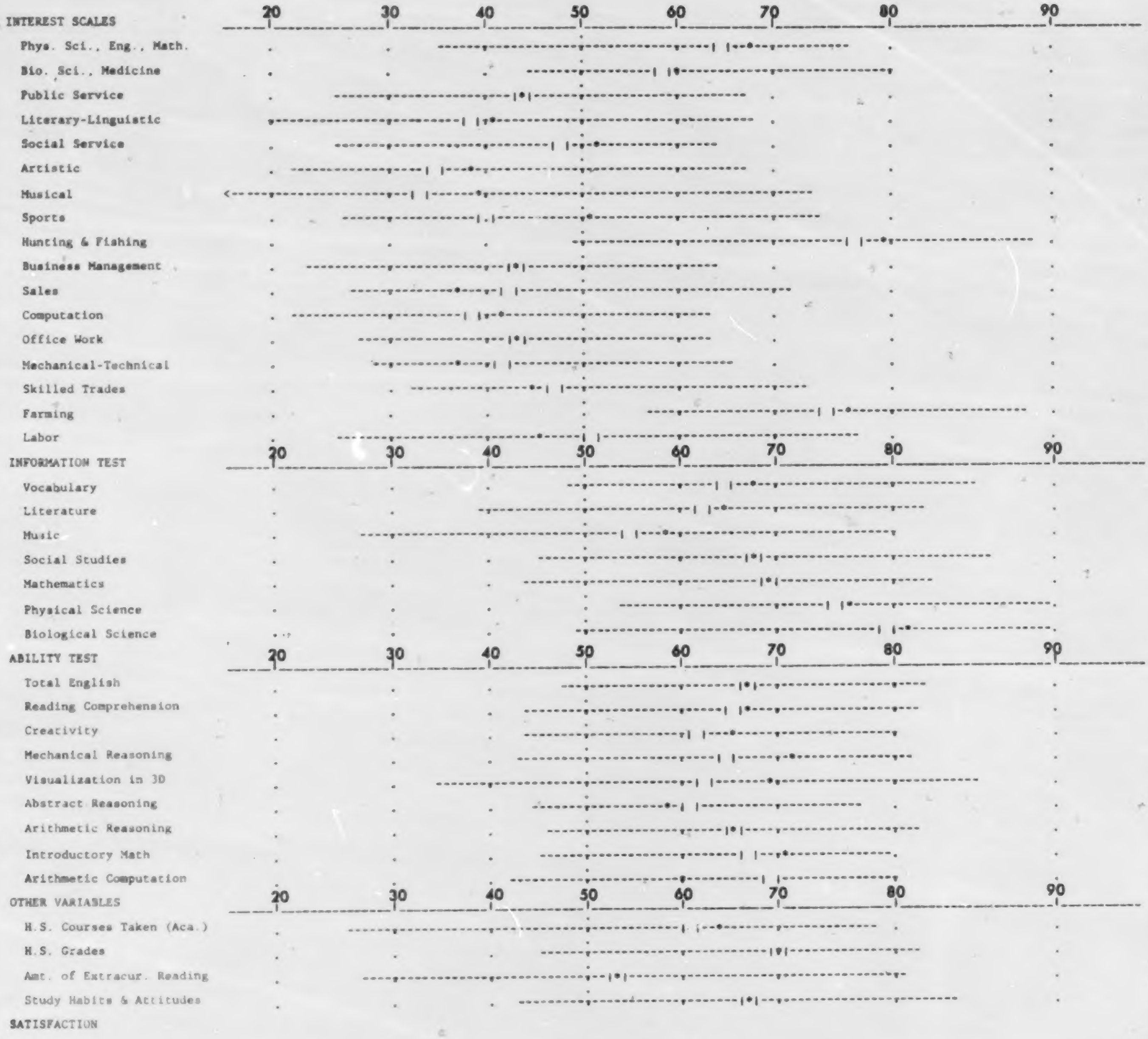
CAREER GROUP 2

MEDICAL AND BIOLOGICAL SCIENCES

CONSERVATION SPECIALIST: WILDLIFE, FORESTRY, AGRICULTURE

(Specialist: Wildlife, Forestry (92%), Specialist: Agriculture (8%))

(n < 1 per 1000)



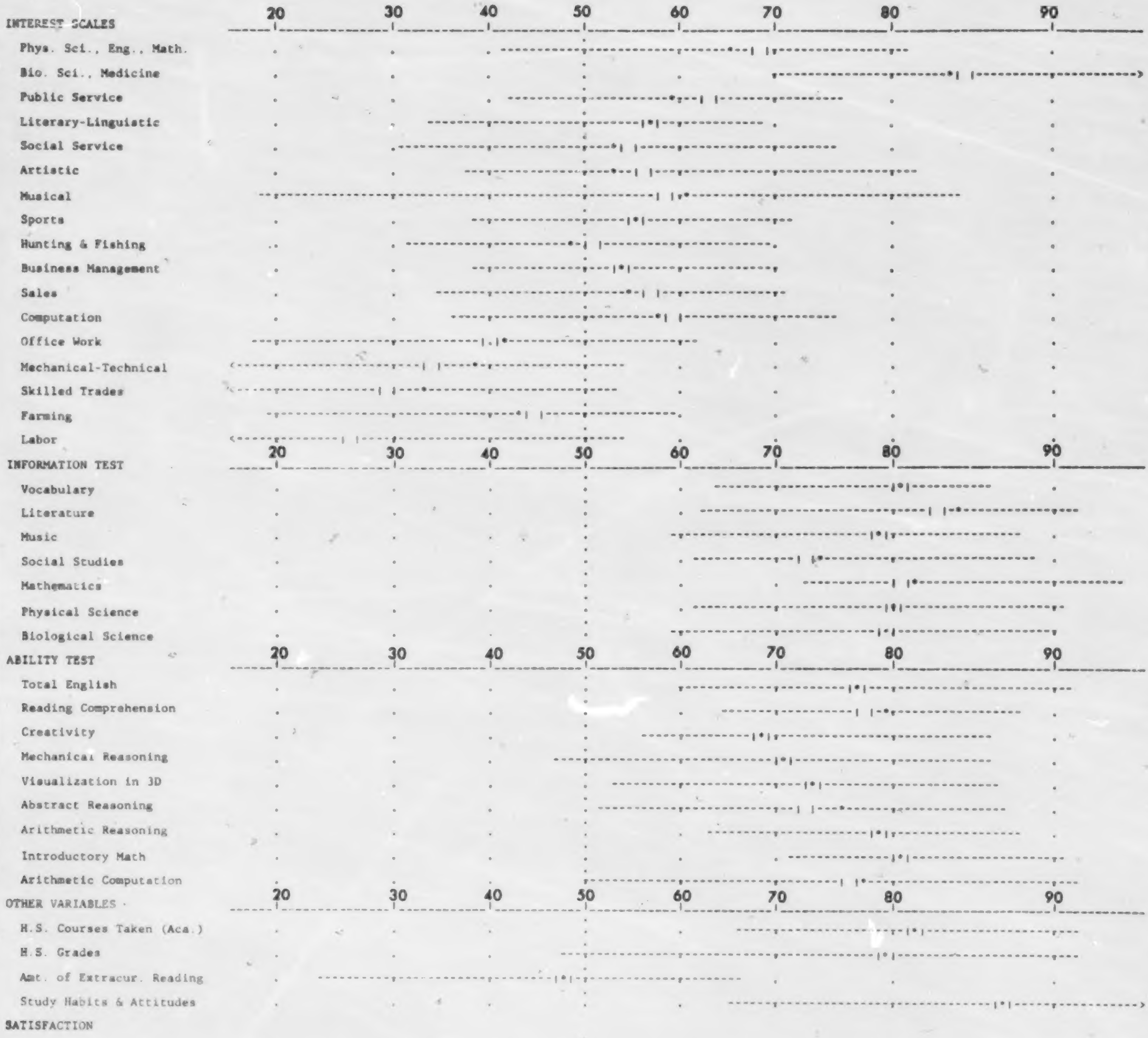
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
Interesting Work
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Income Expected

(* based on 93% of individuals in occupation)

DENTIST

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Importance of Work

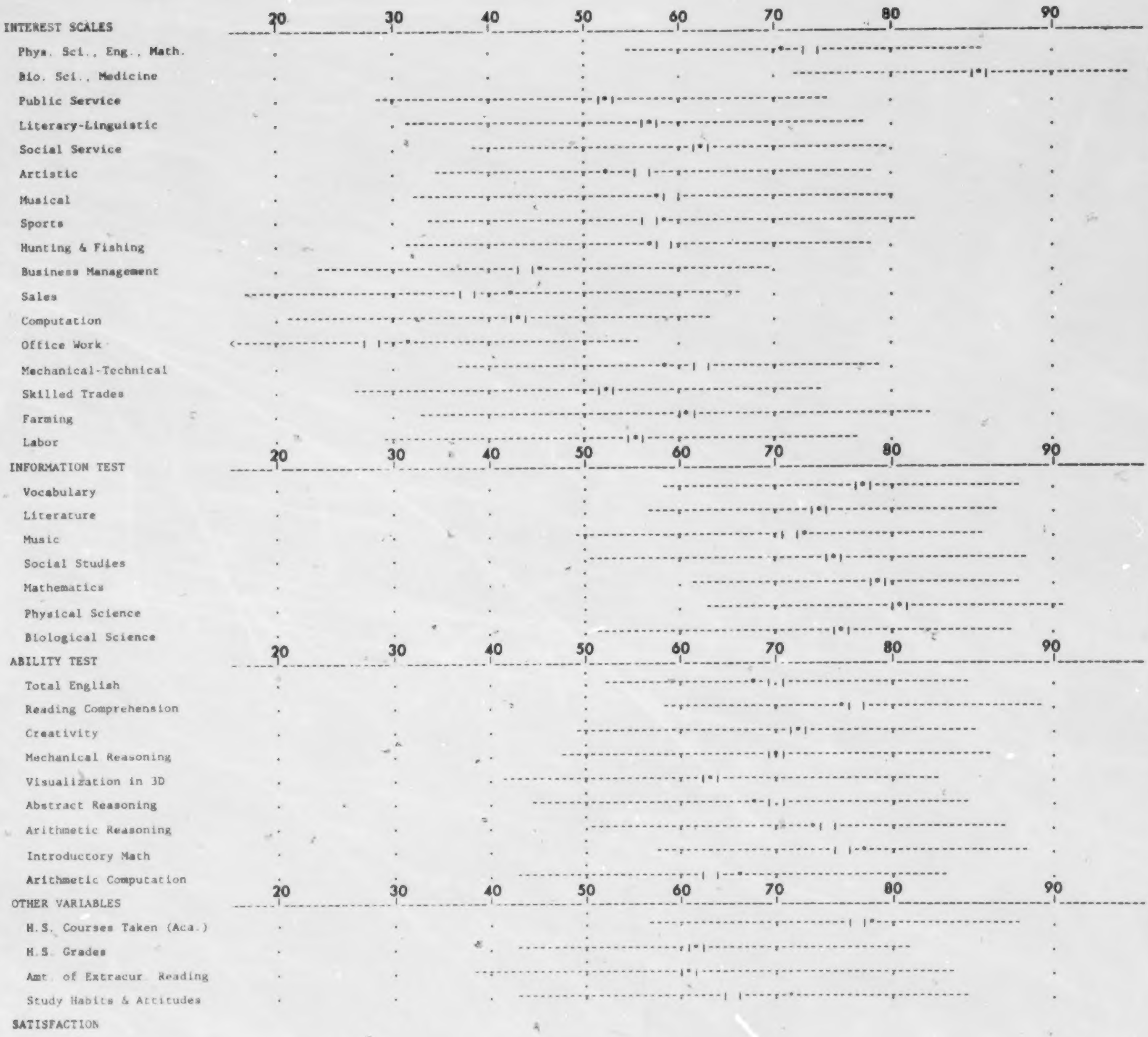
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfyi

Length of Work Week
Income to Start
Status

(* based on 91% of individuals in occupation)

GRADUATE NURSE

(n = 10 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Importance of Work
How Well I Can Do the Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

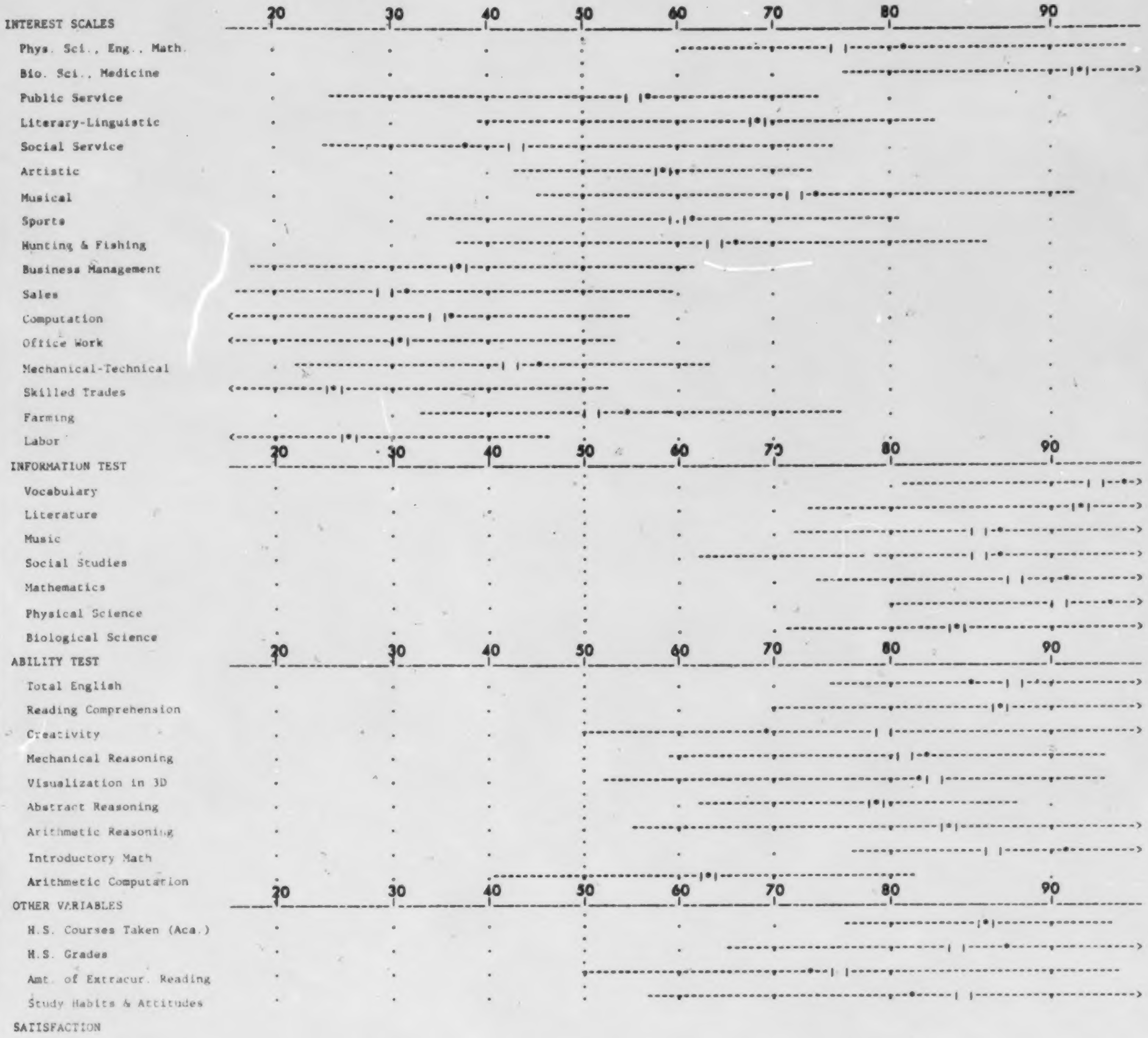
Opportunity to Advance
Length of Vacations
Length of Work Week

(* based on 77% of individuals in occupation)

LIFE SCIENTIST: BIOLOGY, MICROBIOLOGY, BIOCHEMISTRY

(Biologist (50%), Microbiologist (33%), Biochemist (17%))

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Interesting Work
Importance of Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

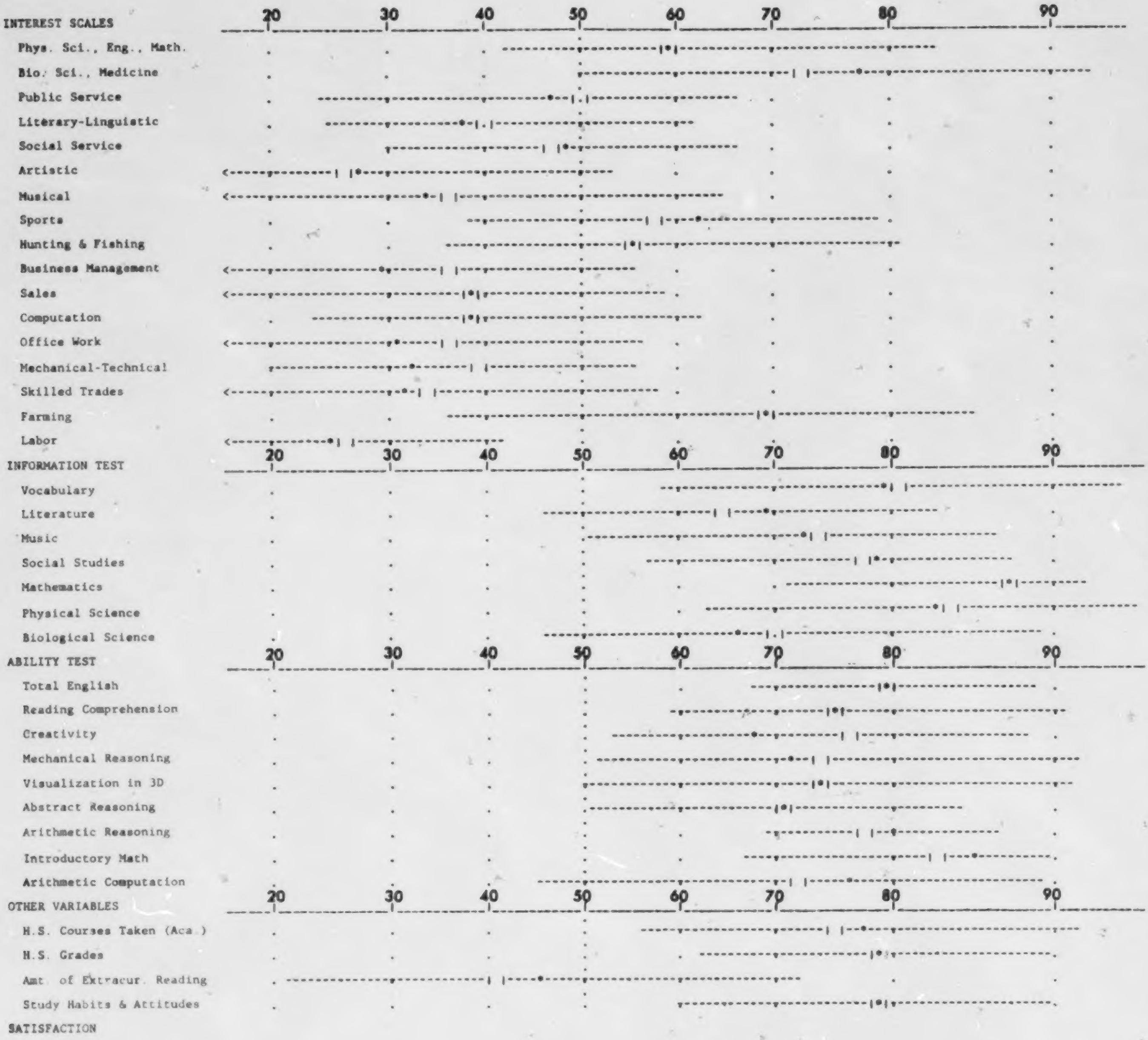
Opportunity to Advance
Status
Job Security

(* based on 93% of individuals in occupation)

MEDICAL SPECIALIST: VETERINARY MEDICINE, OPTOMETRY, OSTEOPATHY

(Veterinarian (67%), Optometrist (21%), Osteopath (12%))

(n < 1 per 1000)



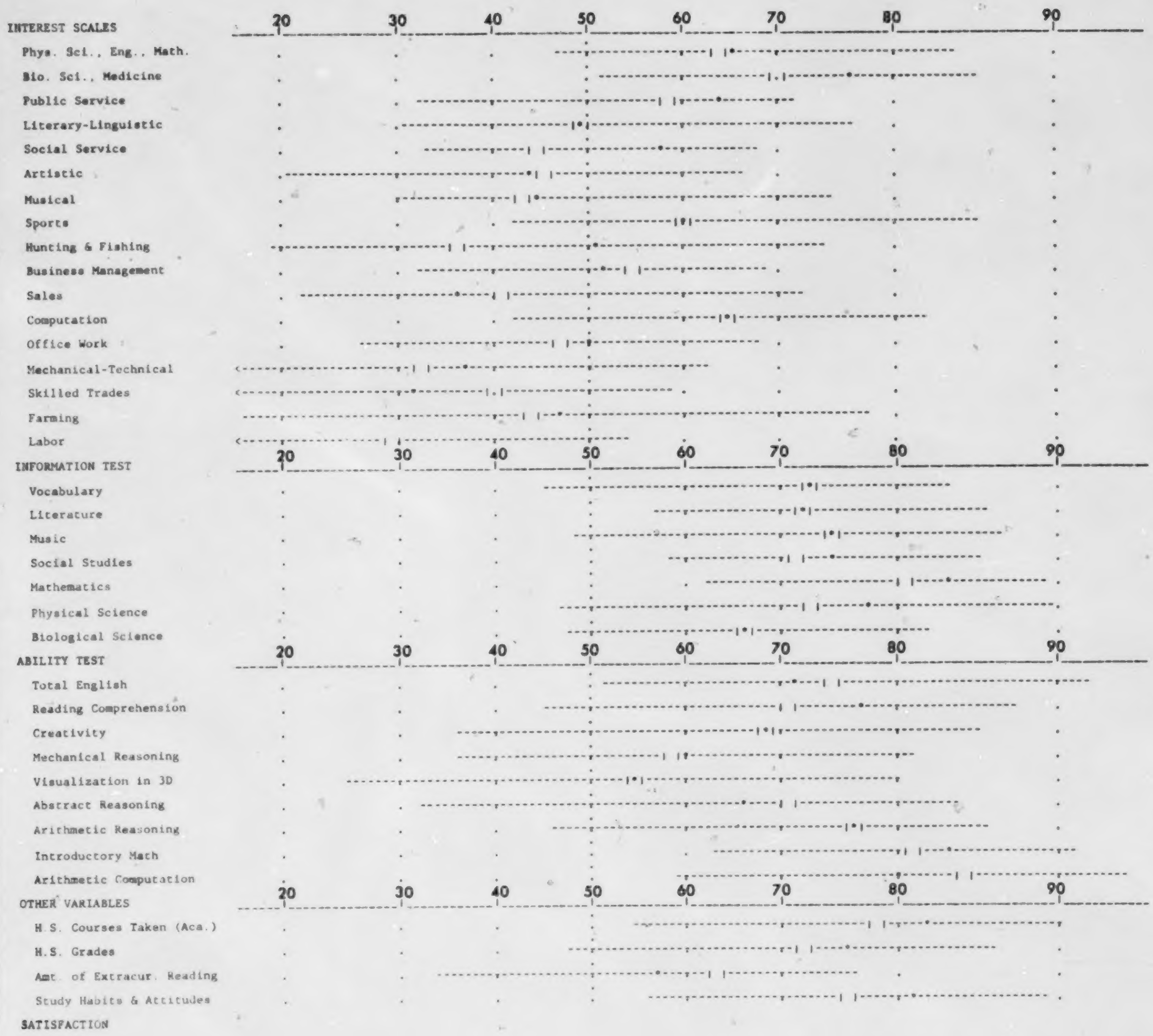
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Quality of Surroundings

(* based on 83% of individuals in occupation)

PHARMACIST

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
How Well I Can Do the Work
Job Security

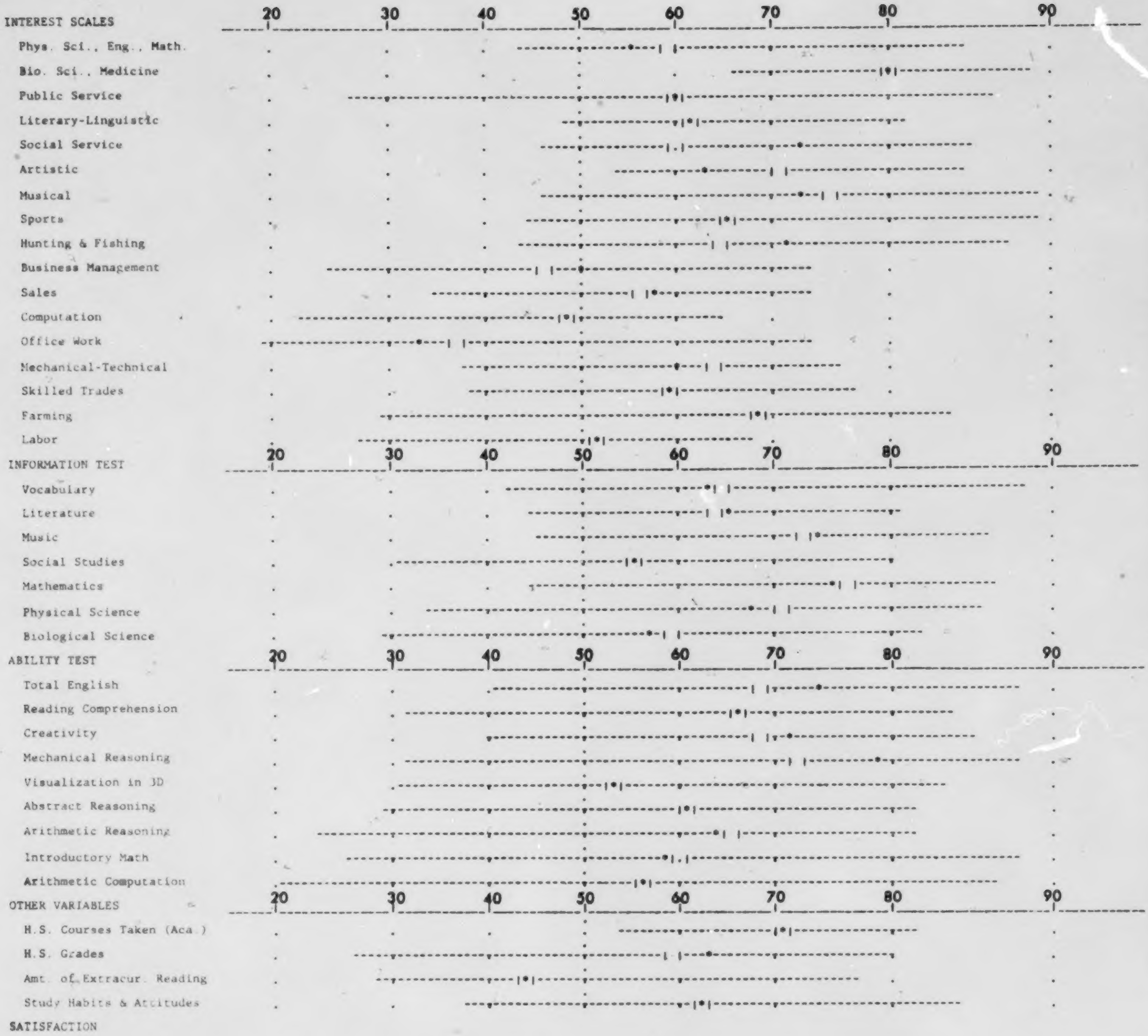
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Length of Work Week
Opportunity to Advance

(* based on 51% of individuals in occupation)

PHYSICAL THERAPIST (INCLUDING OCCUPATIONAL THERAPIST)

(Specialized Therapist (67%), Physical Therapist (26%), Occupational Therapist (7%))

(n = 1 per 1000)



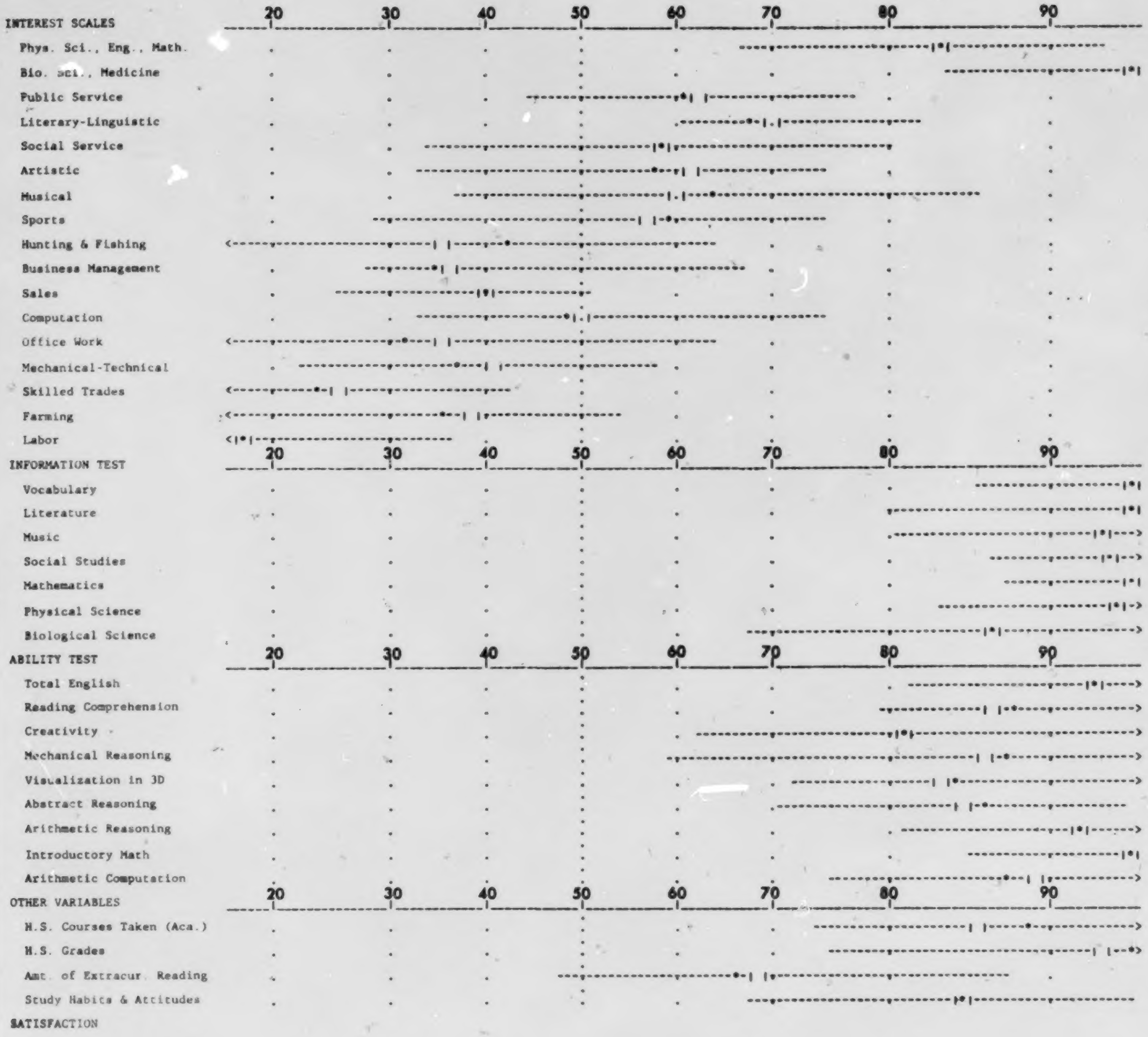
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Status
Quality of Surroundings

PHYSICIAN

(General Practitioner (13%), Surgeon (13%), Psychiatrist (3%), Medical Researcher (1%), Other Physicians (70%))

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Relationship of Work to Prior Training
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Quality of Surroundings
Income to Start
Status

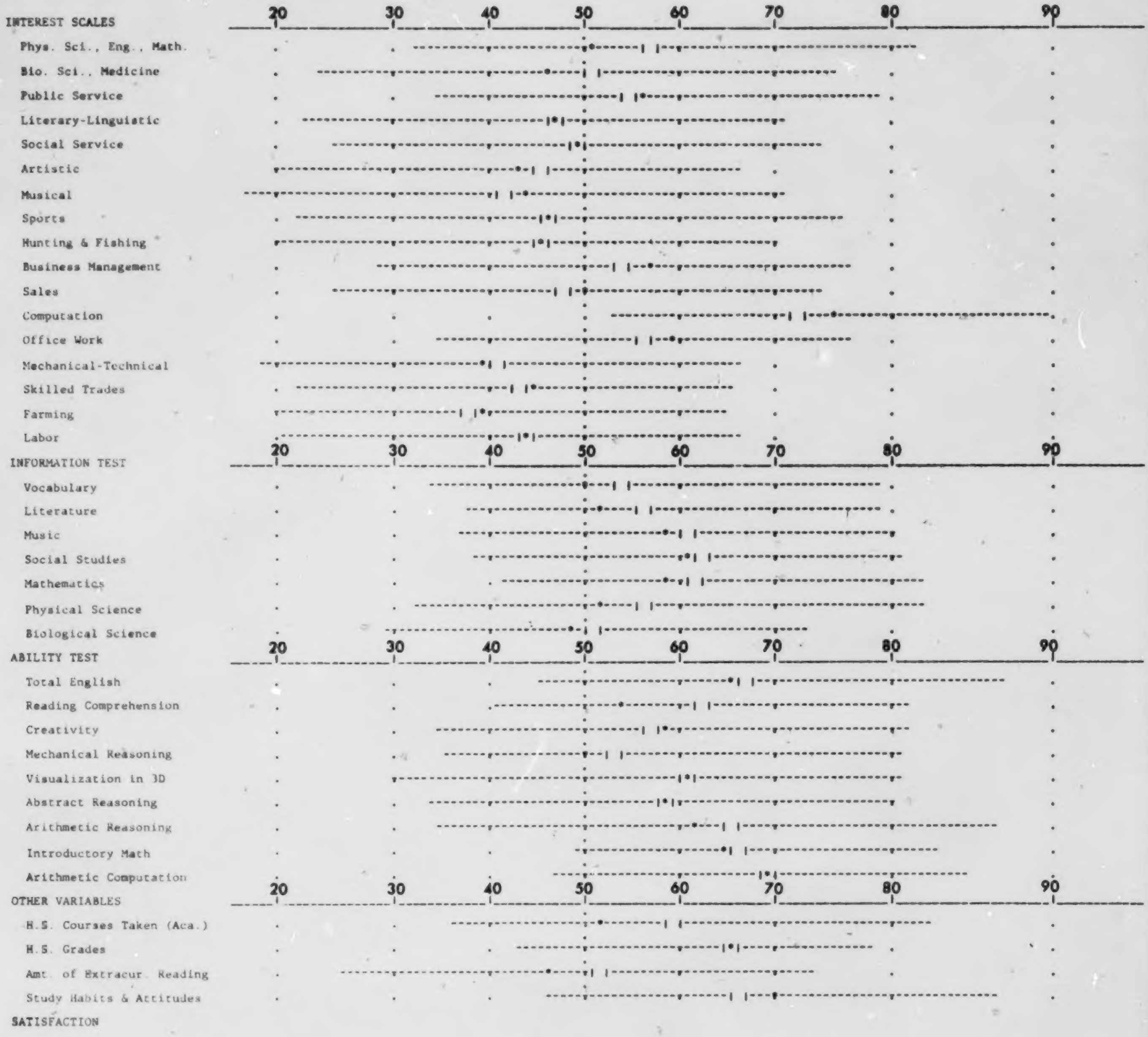
(* based on 88% of individuals in occupation)

CAREER GROUP 3

BUSINESS ADMINISTRATION

ACCOUNTANT, AUDITOR, COMPTROLLER

(n = 8 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Job Security
Friendliness of Co-workers

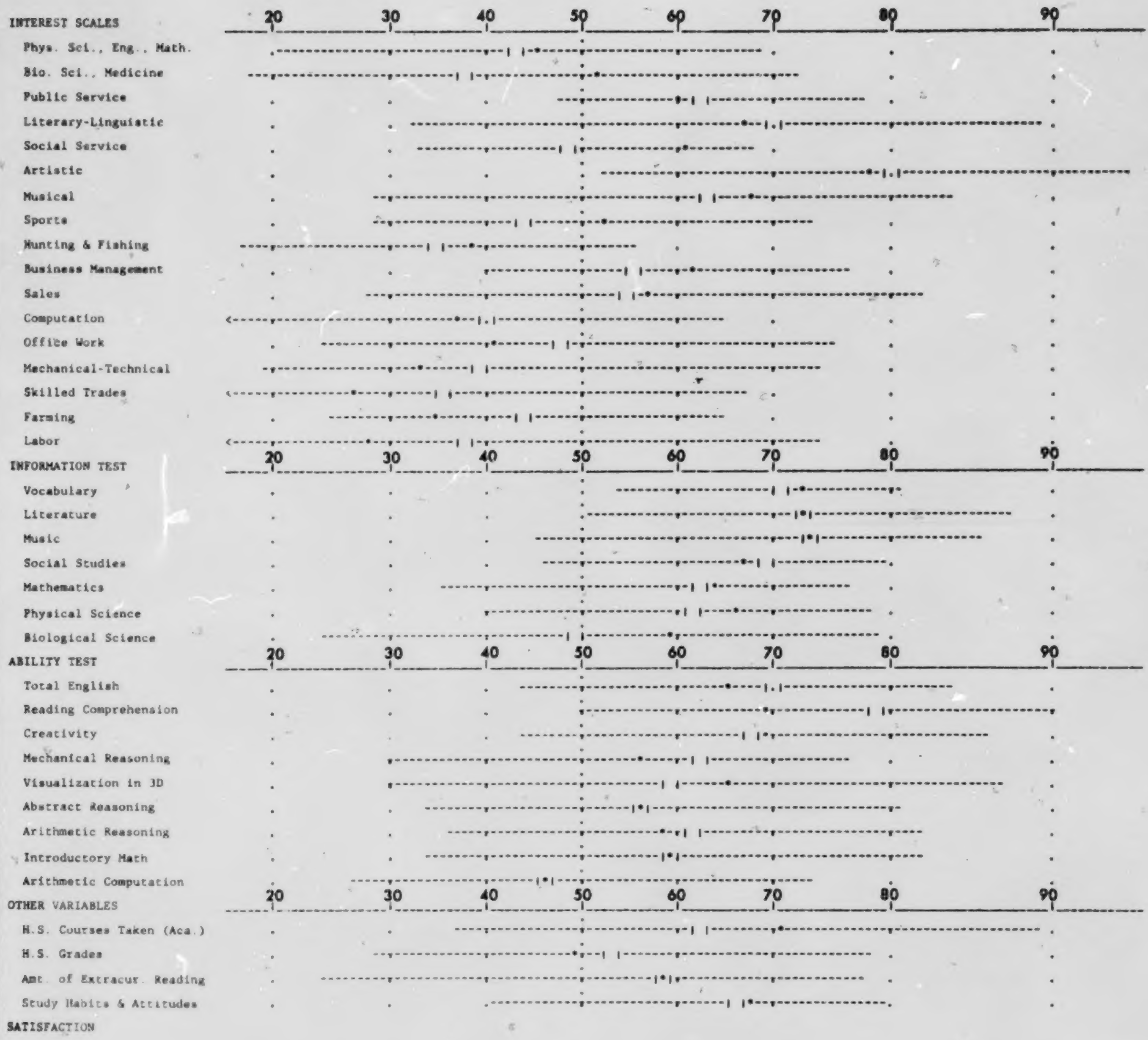
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Income to Start
Quality of Surroundings

(* based on 65% of individuals in occupation)

ADVERTISING WORKER

(n = 2 per 1000)



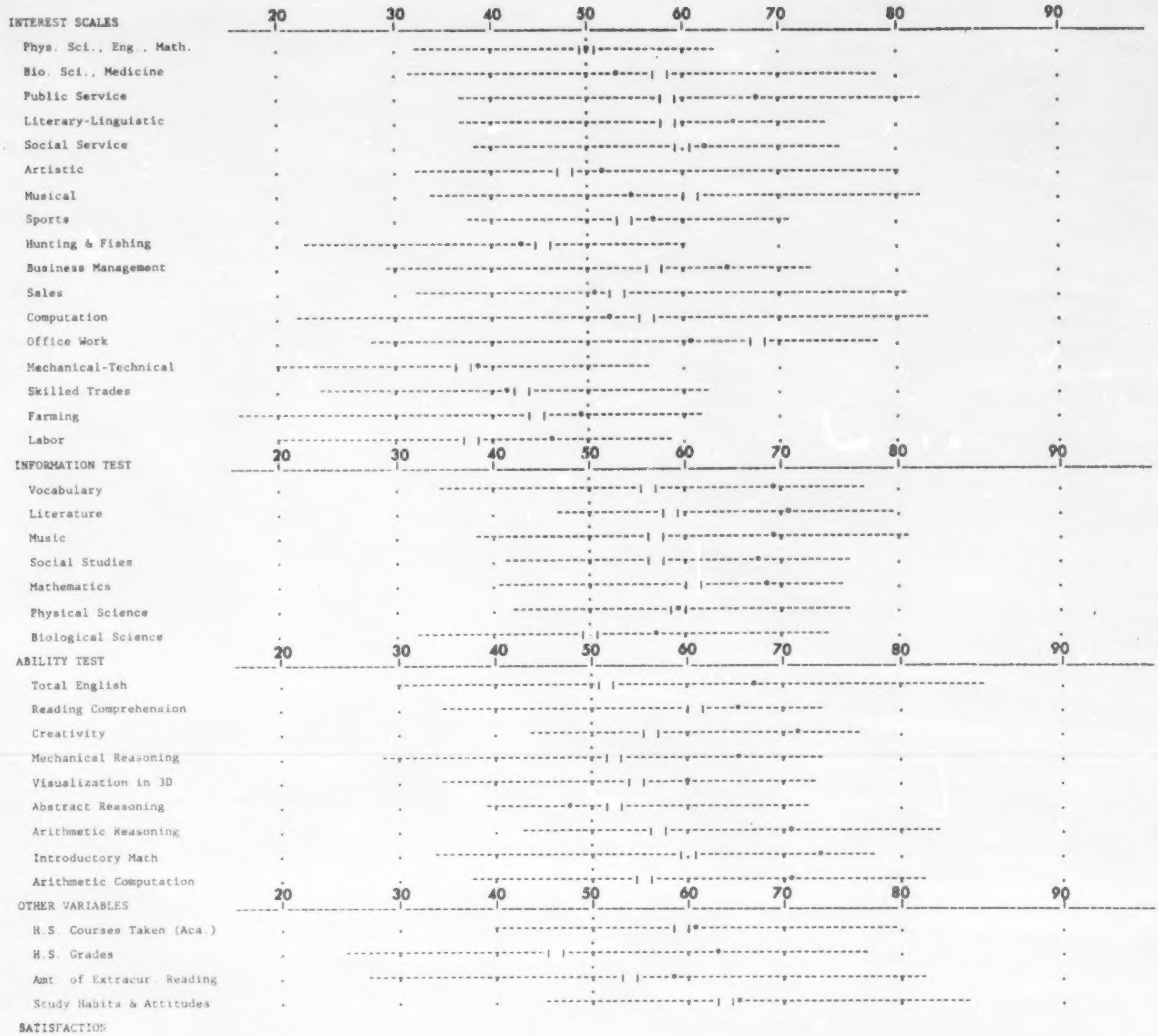
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Power
Income to Start
Opportunity to Advance

(* based on 58% of individuals in occupation)

BANKING/FINANCE WORKER

(n = 5 per 1000)



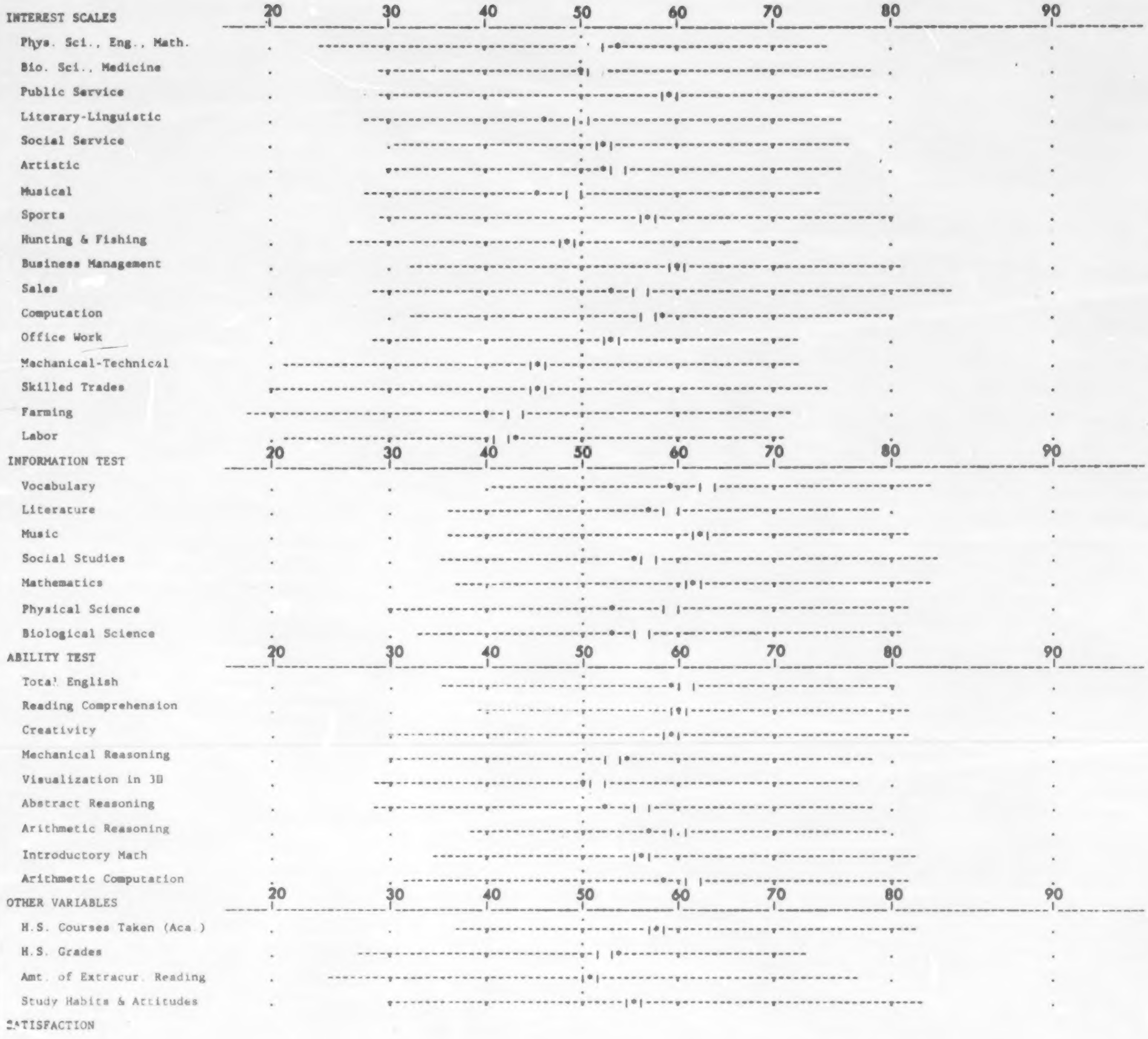
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Power
Quality of Surroundings

(* based on 56% of individuals in occupation)

BUSINESS EXECUTIVE/MANAGER

(n = 17 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Job Security
Friendliness of Co-workers

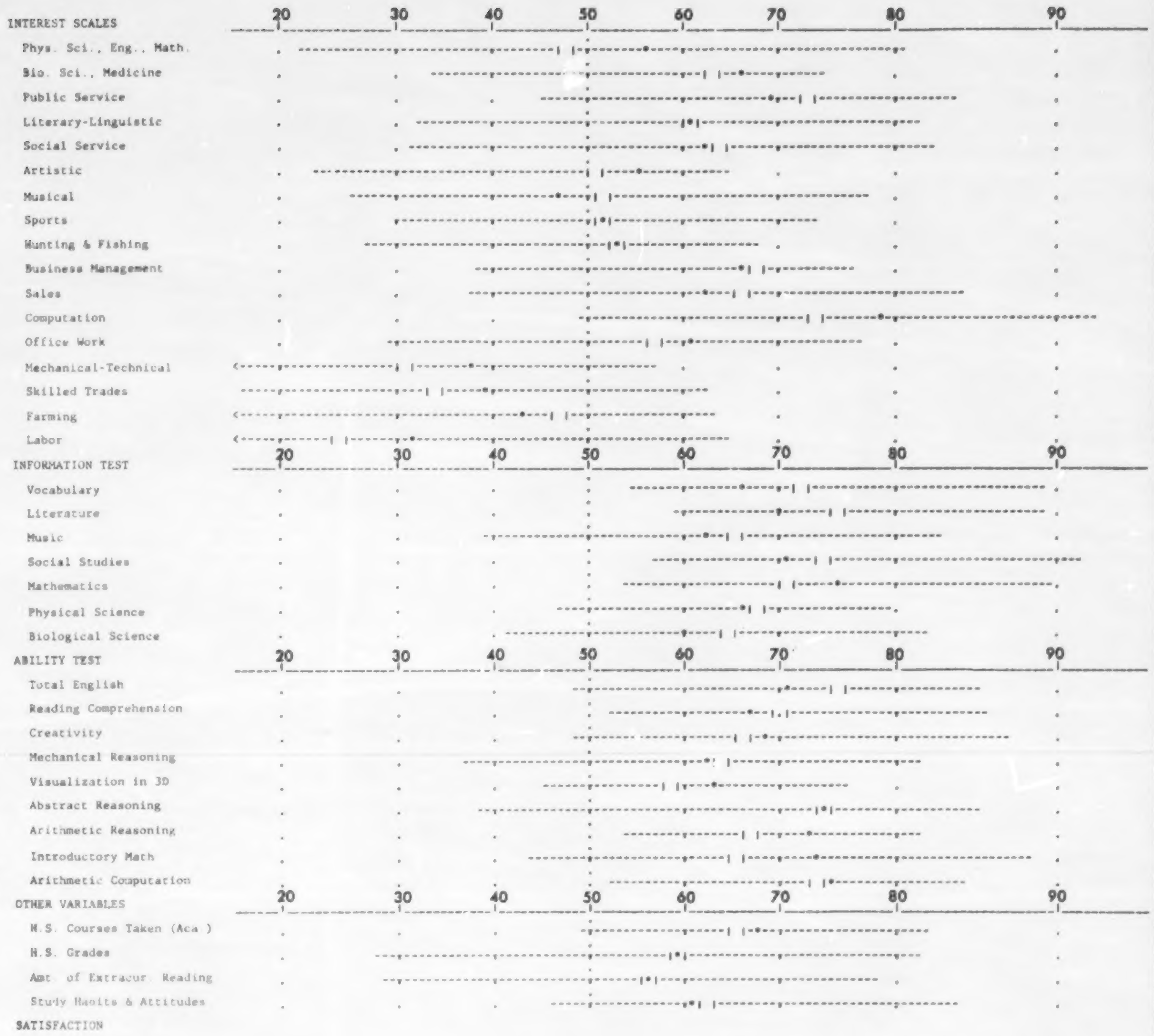
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Status
Relationship of Work to Prior Training

(* based on 67% of individuals in occupation)

CERTIFIED PUBLIC ACCOUNTANT

(n = 4 per 1000)



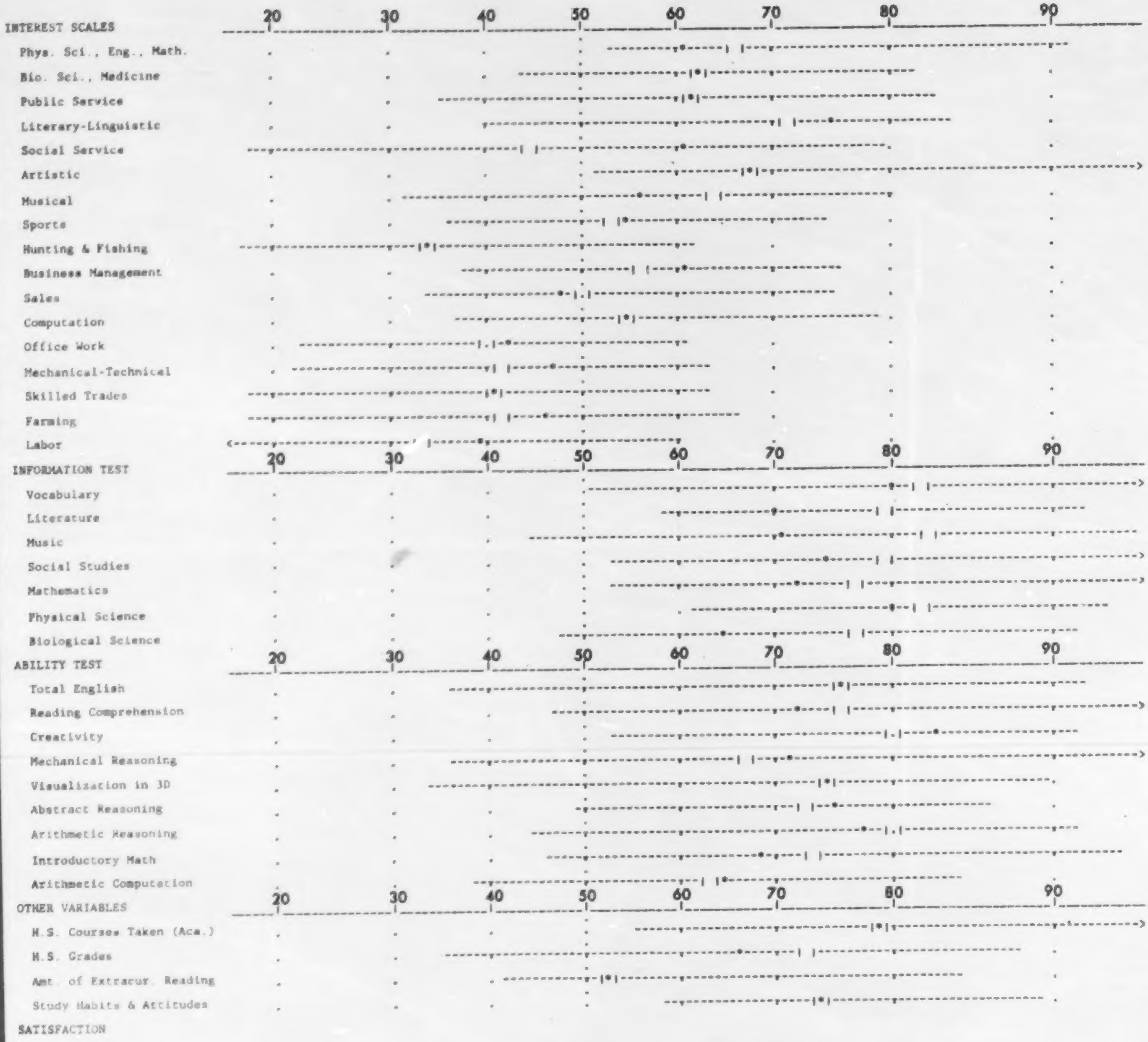
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
How Well I Can Do the Work
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Job Security

(* based on 70% of individuals in occupation)

CITY PLANNER

(n < 1 per 1000)



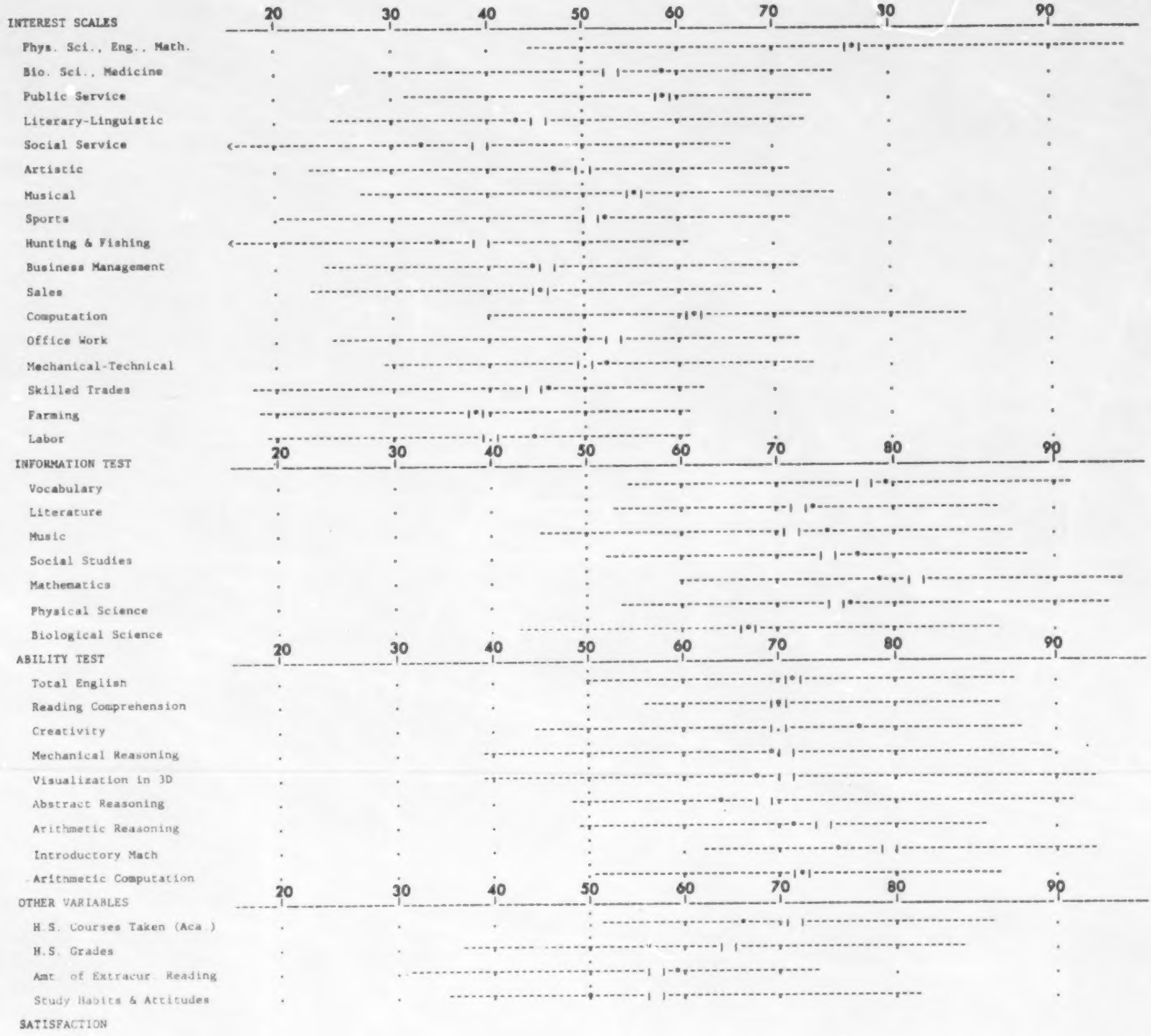
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Income to Start

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

(* based on 77% of individuals in occupation)

COMPUTER PROGRAMMER

(n = 4 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Job Security
How Well I Can Do the Work
Income Expected

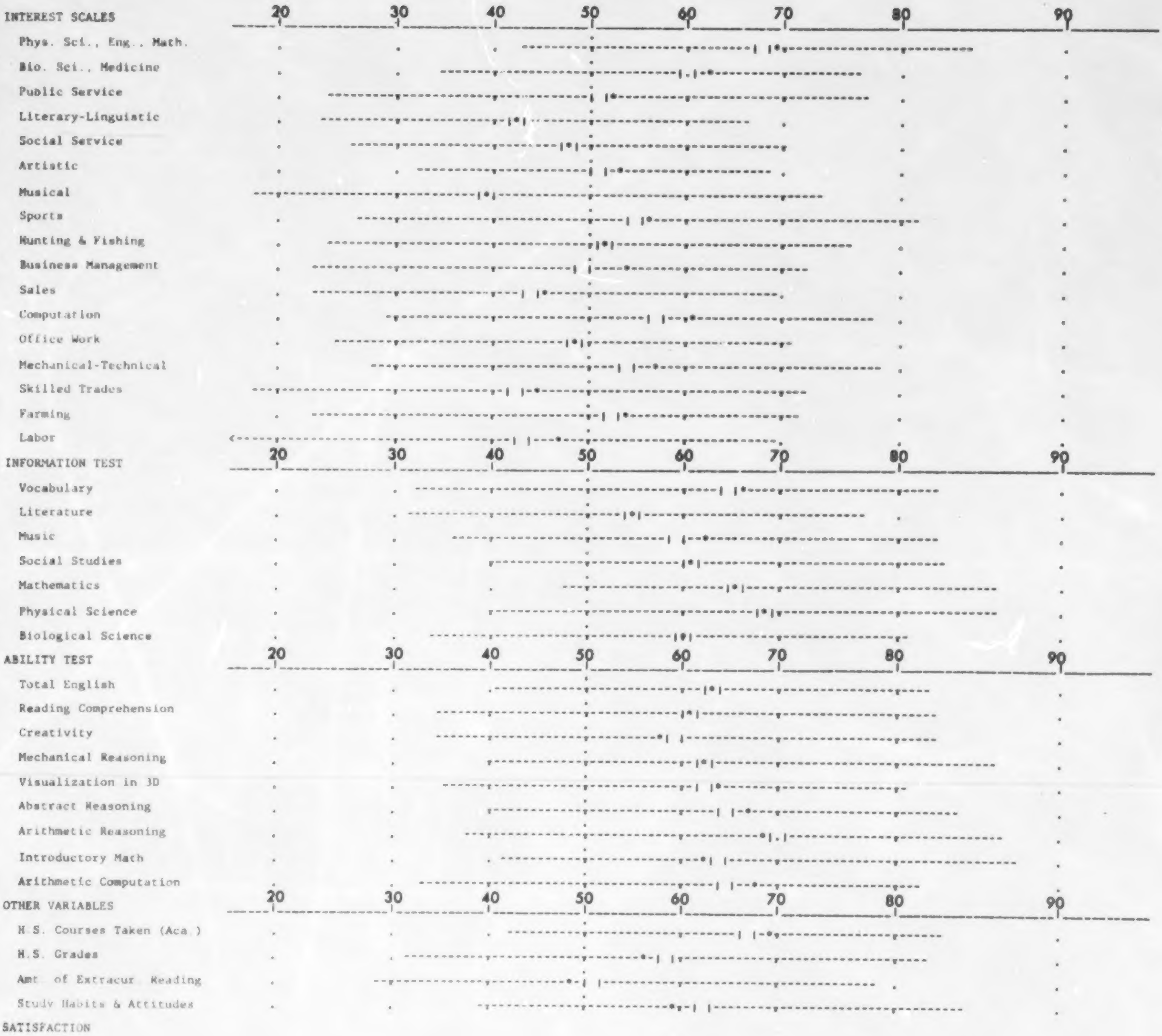
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Importance of Work
Relationship of Work to Prior Training

(* based on 67% of individuals in occupation)

EFFICIENCY EXPERT

(n = 6 per 1000)



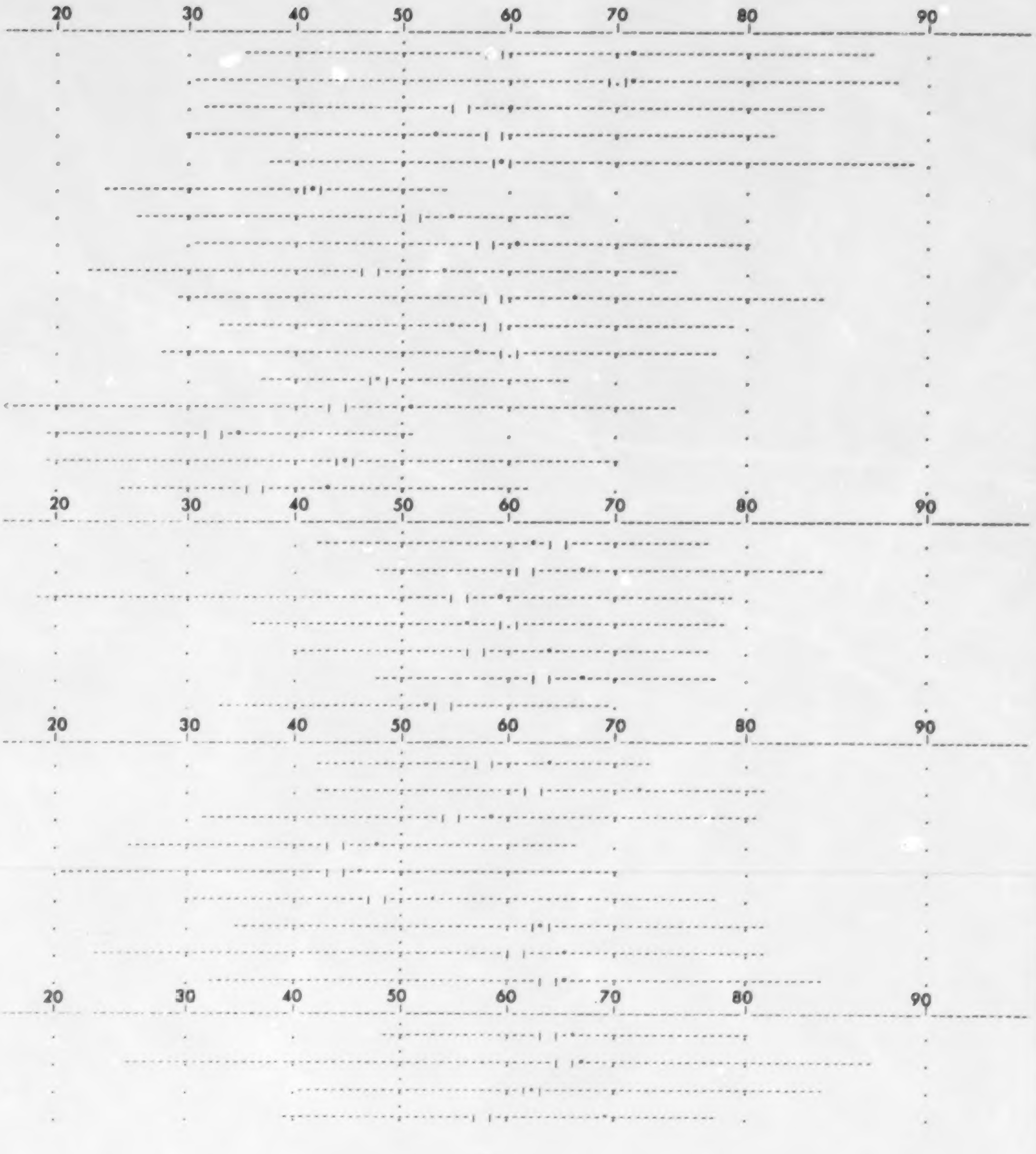
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Quality of Surroundings
Status

(* based on 76% of individuals in occupation)

HOSPITAL ADMINISTRATOR

(n = 3 per 1000)



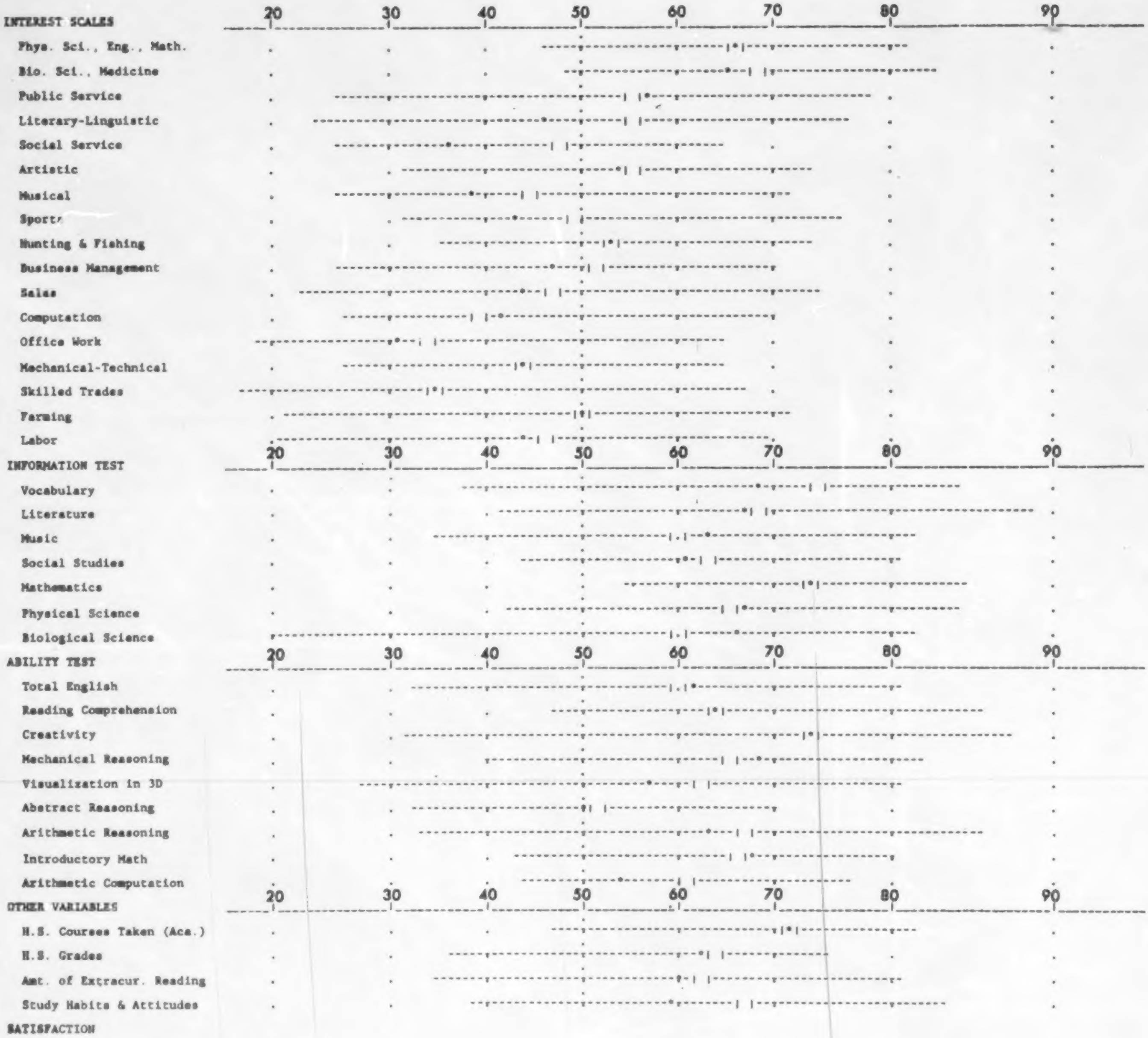
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Interesting Work
Importance of Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Power
Opportunity to Advance
Status

(* based on 50% of individuals in occupation)

MANUFACTURING MANAGER

(n = 2 per 1000)



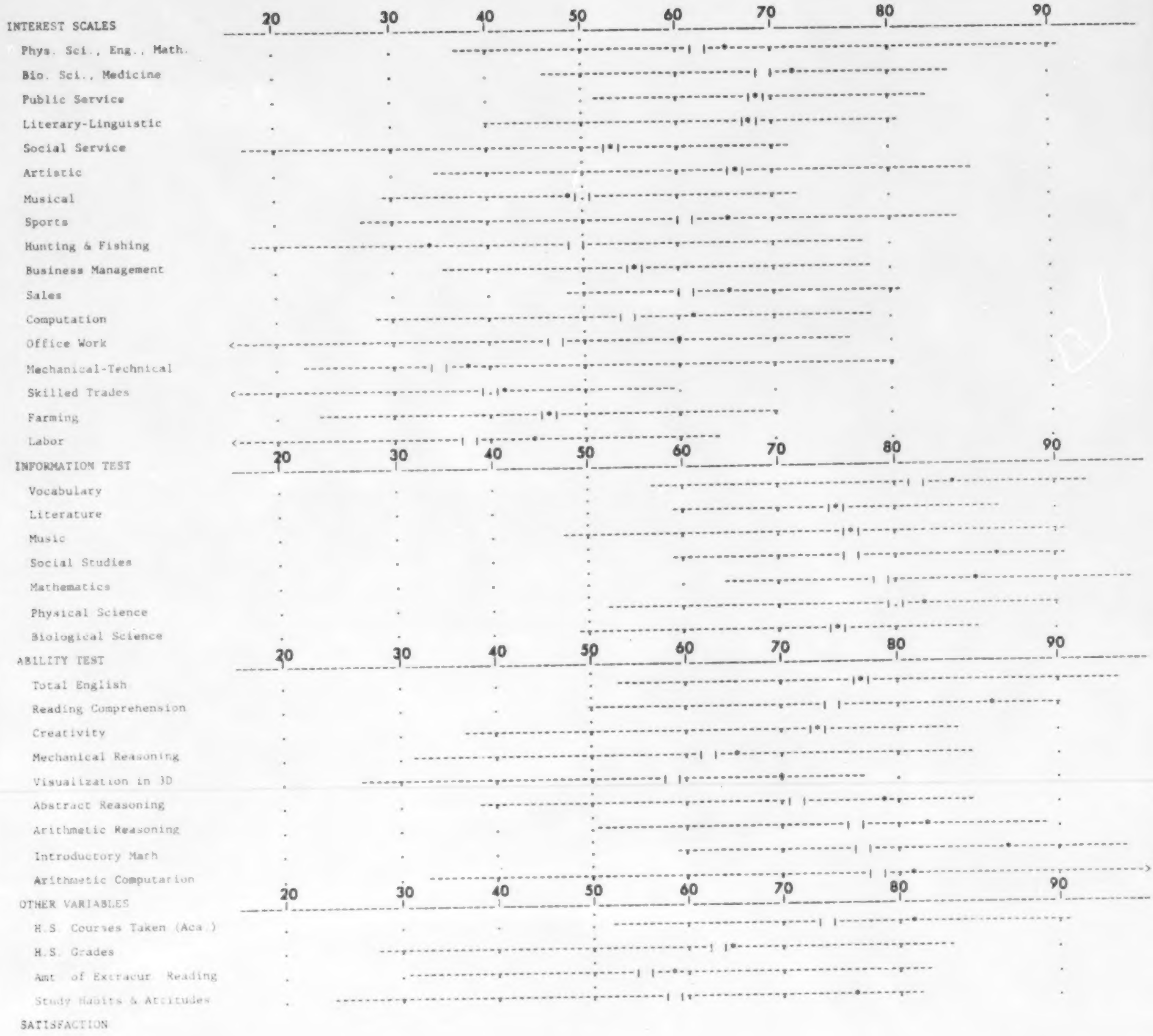
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Opportunity to Advance
How Well I Can Do the Work
Income Expected

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Status
Relationship of Work to Prior Training
Quality of Surroundings

(* based on 67% of individuals in occupation)

MARKET ANALYST

(n < 1 per 1000)



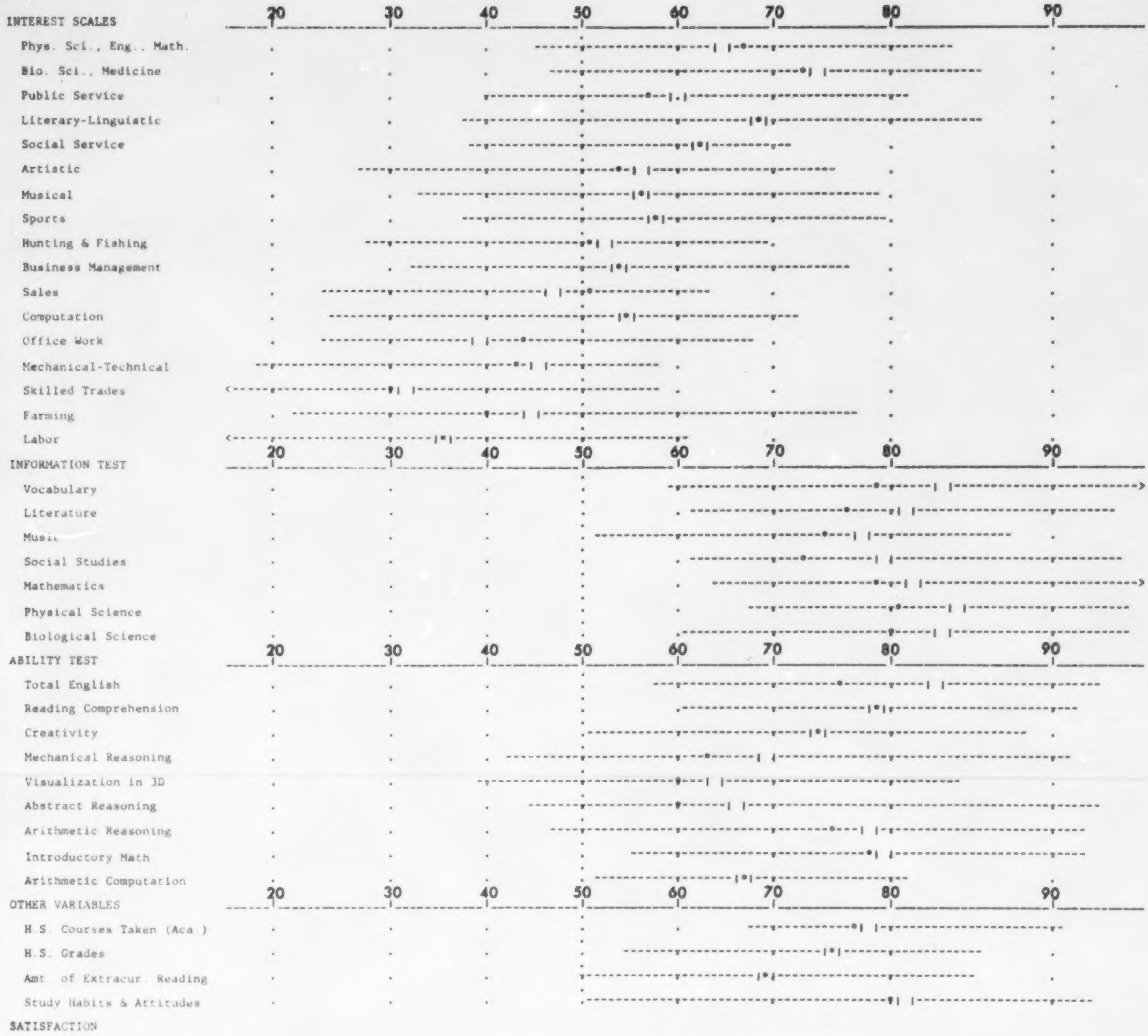
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Quality of Surroundings
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Power
Length of Vacations
Status

(* based on 34% of individuals in occupation)

OFFICER: U. S. AIR FORCE, ARMY, NAVY, MARINES, COAST GUARD

(n = 3 per 1000)



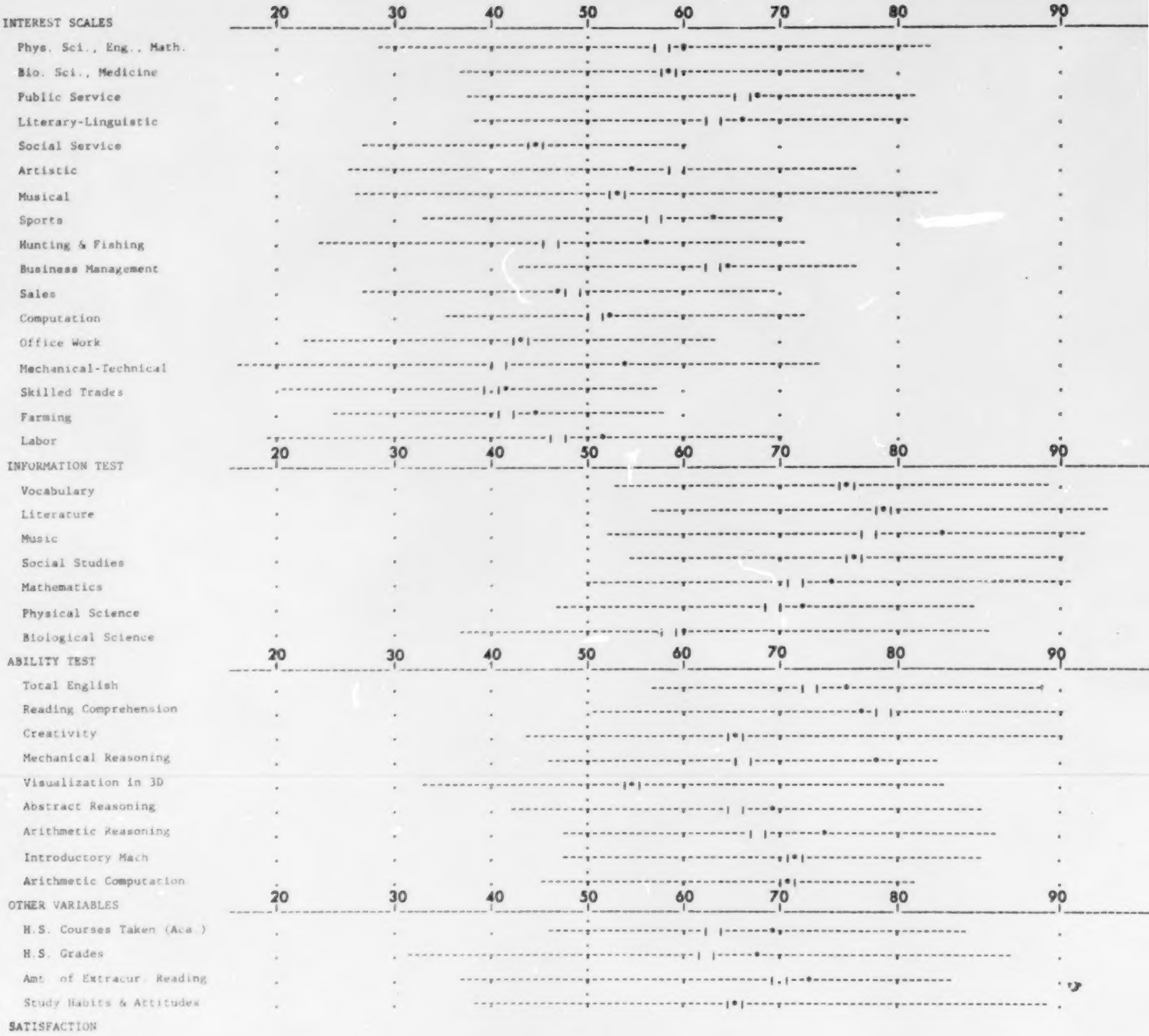
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Quality of Surroundings
Income to Start
Power

(* based on 81% of individuals in occupation)

PERSONNEL ADMINISTRATOR

(n = 4 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Job Security

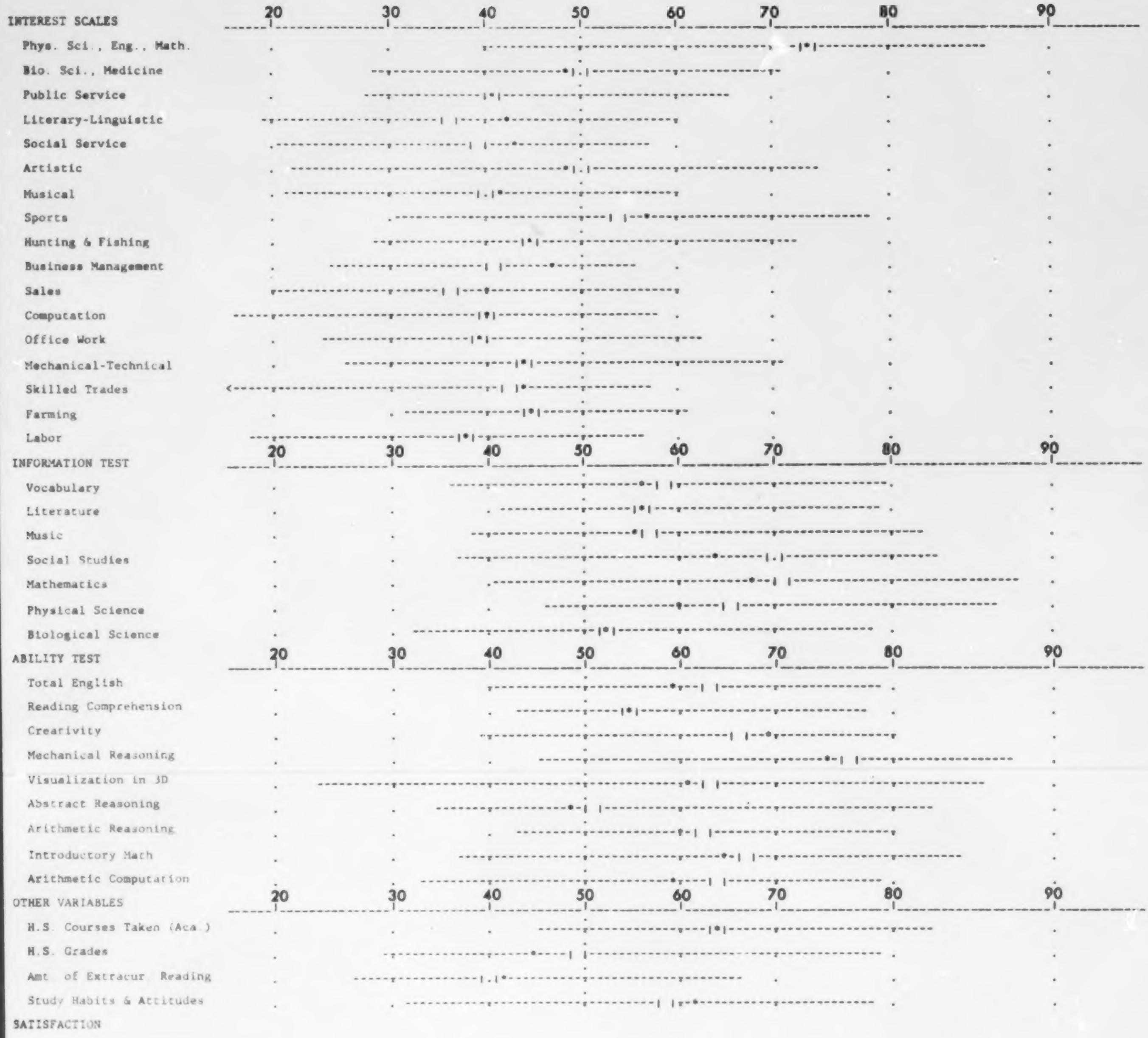
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Relationship of Work to Prior Training
Income to Start
Status

(* based on 68% of individuals in occupation)

PILOT

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Relationship of Work to Prior Training
Interesting Work

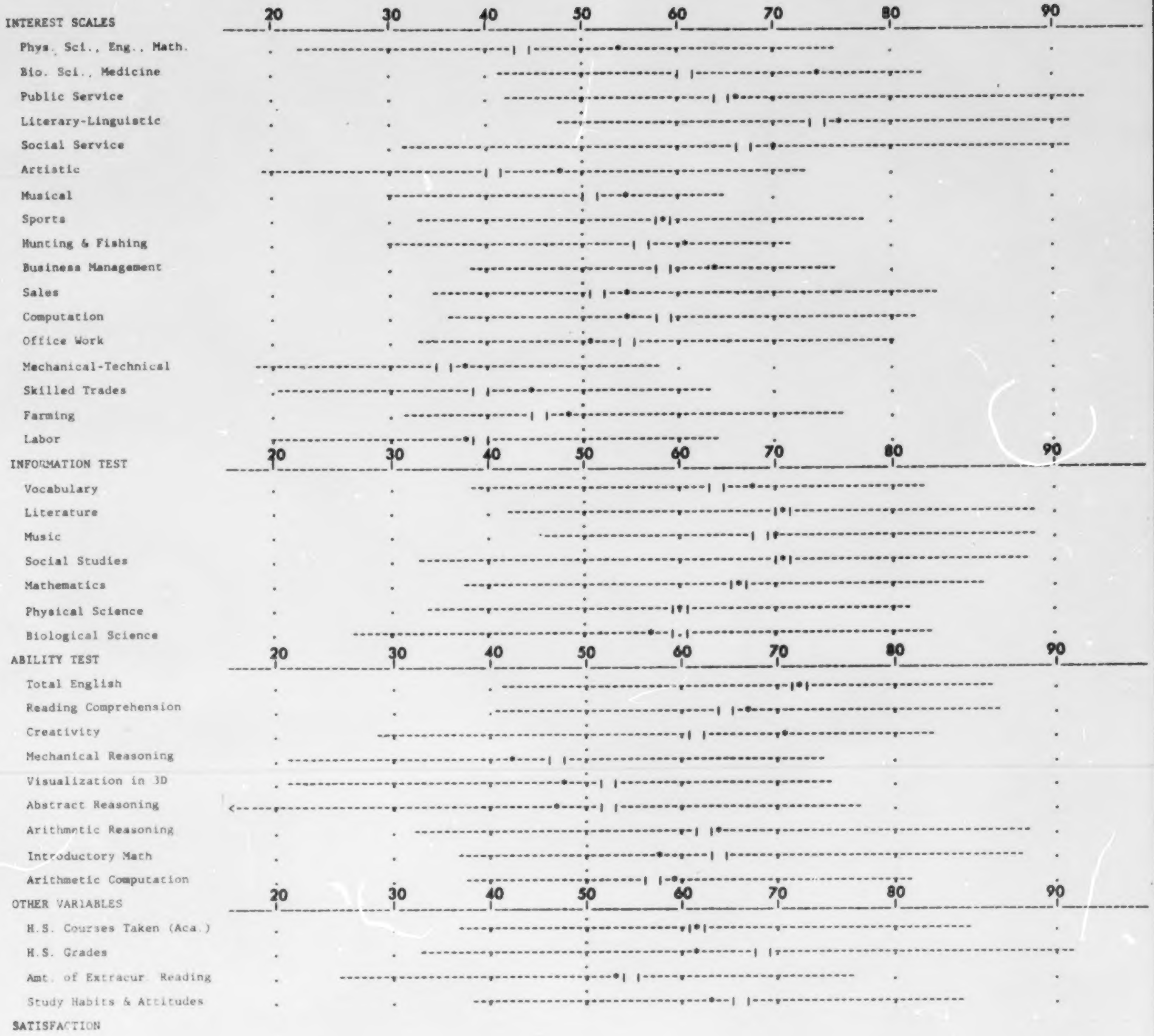
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Quality of Surroundings
Income Expected

(* based on 83% of individuals in occupation)

PUBLIC ADMINISTRATOR

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Importance of Work
Interesting Work

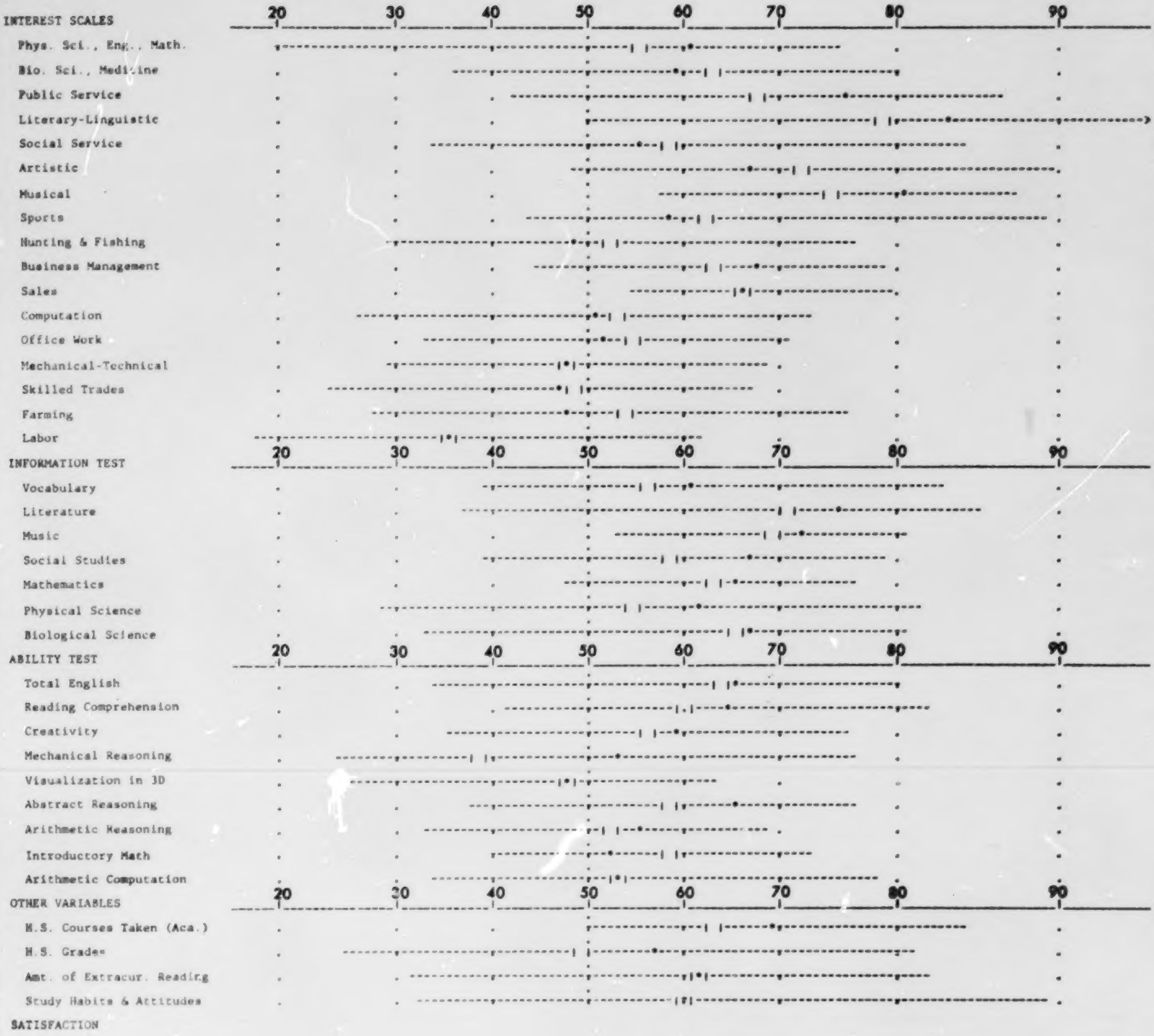
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income Expected
Status

(* based on 62% of individuals in occupation)

PUBLIC RELATIONS WORKER

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Interesting Work
Challenging Work

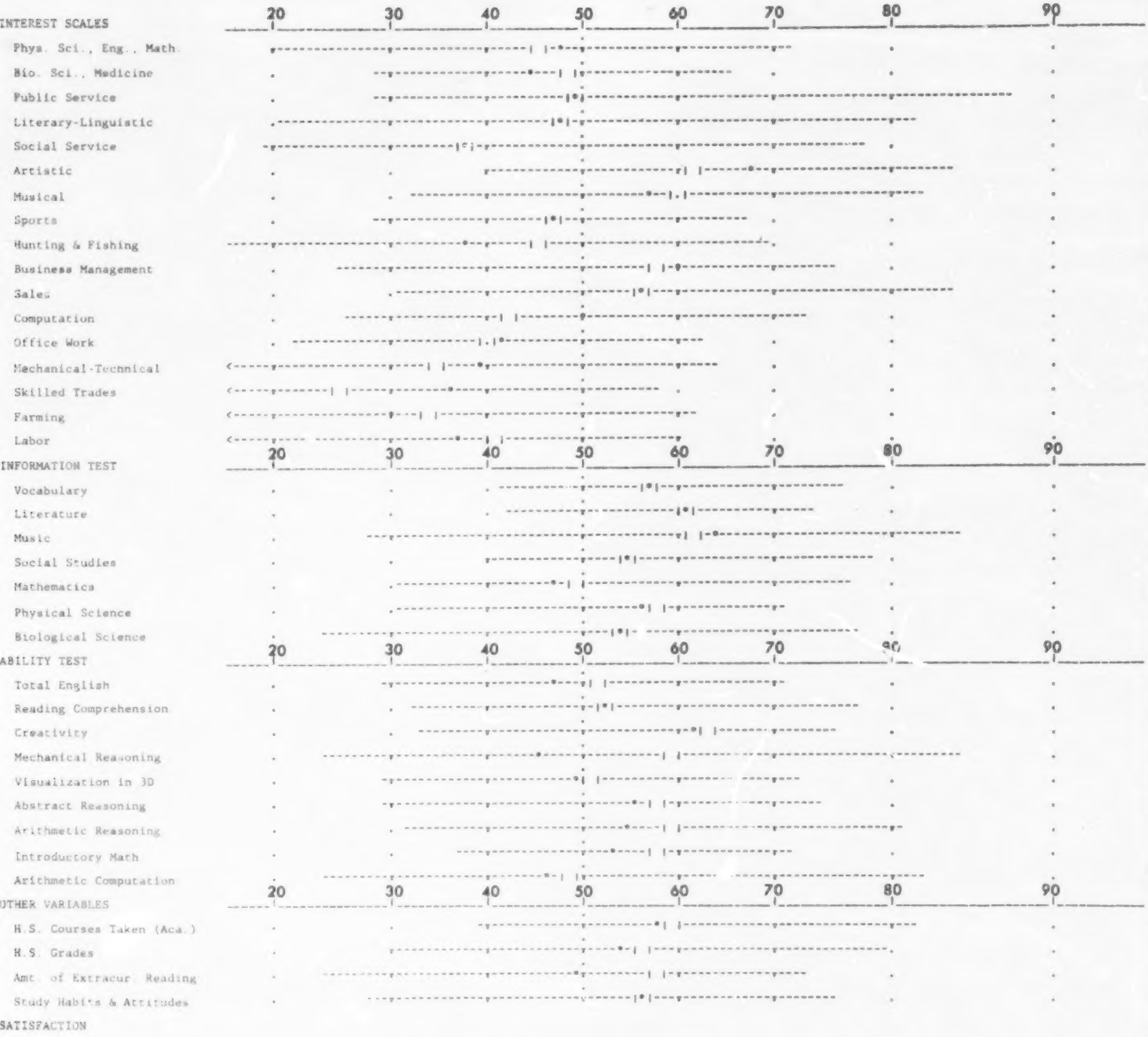
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Power
Opportunity to Advance
Income to Start

(* based on 61% of individuals in occupation)

RETAIL STORE BUYER

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Interesting Work
Challenging Work

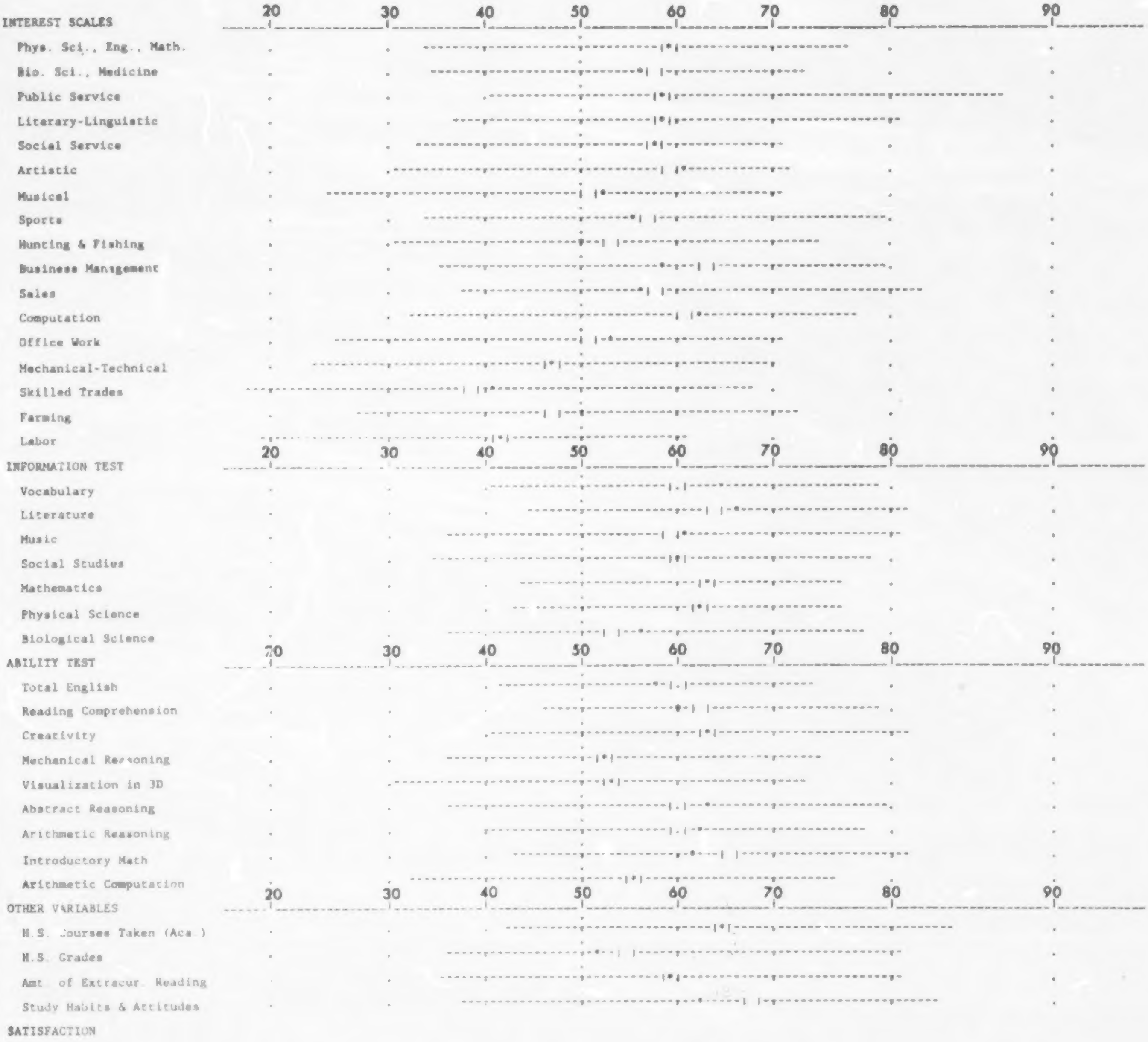
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Importance of Work
Opportunity to Advance

(* based on 79% of individuals in occupation)

SALES MANAGER

(n = 8 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Interesting Work
How Well I Can Do the Work
Income Expected

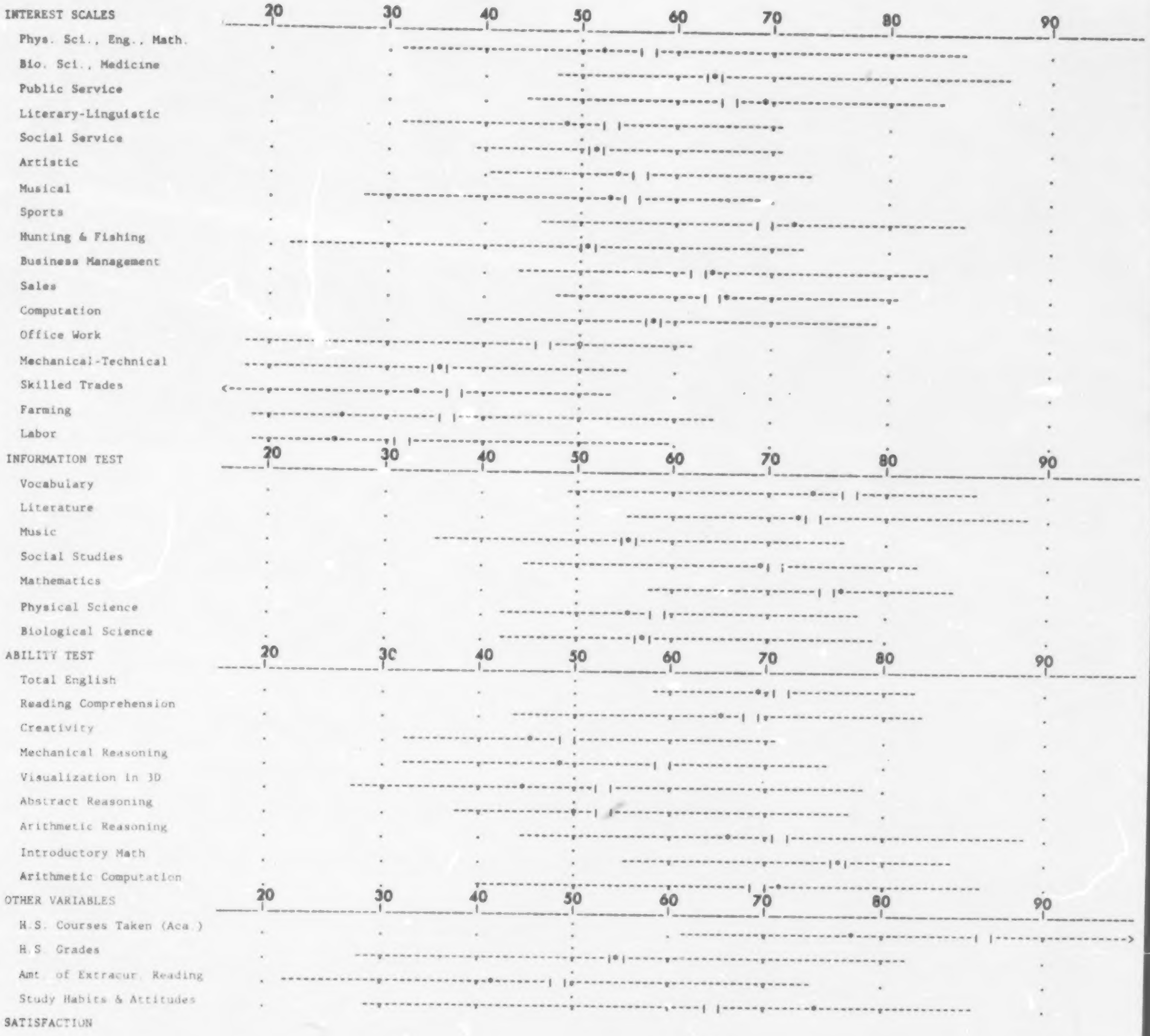
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Income to Start
Quality of Surroundings

(* based on 68% of individuals in occupation)

STOCKBROKER

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Income Expected
Interesting Work
Challenging Work

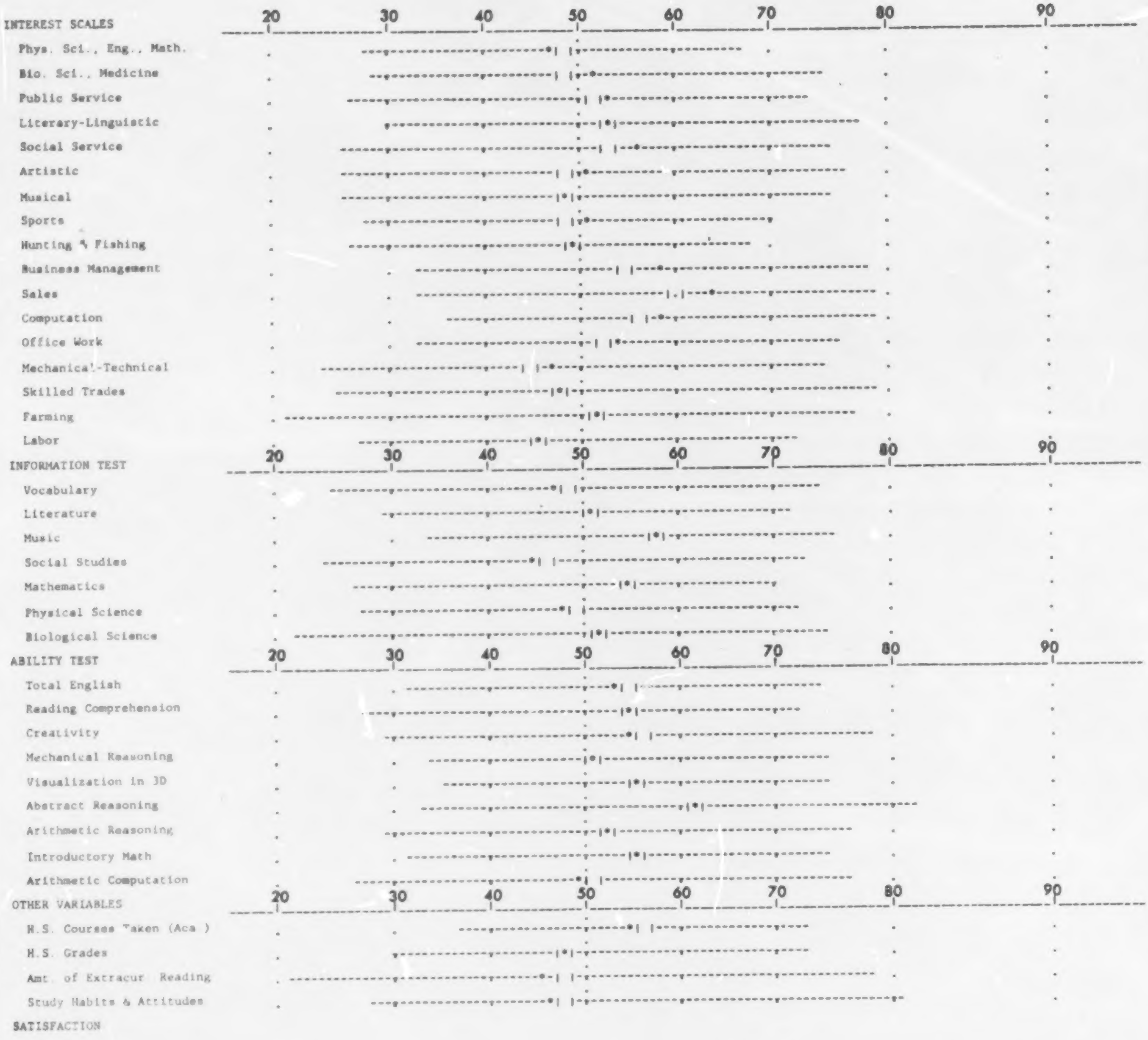
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Job Security
Income to Start
Opportunity to Advance

(* based on 50% of individuals in occupation)

WHOLESALE/RETAIL TRADE MANAGER

(n = 11 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Relationship of Work to Prior Training
Importance of Work

(* based on 84% of individuals in occupation)

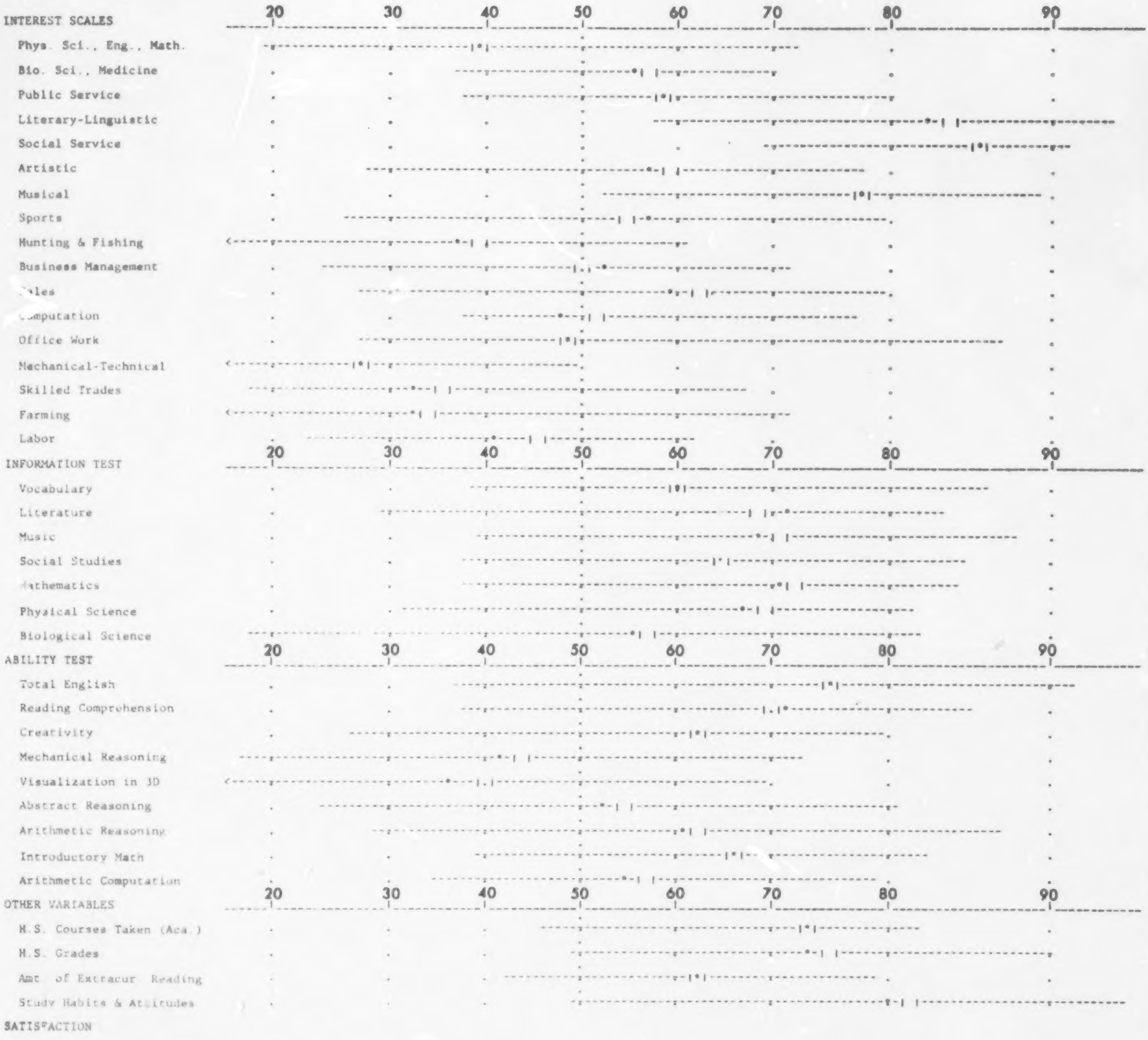
CAREER GROUP 4

GENERAL TEACHING AND SOCIAL SERVICE

CLERGY AND OTHER RELIGIOUS WORKERS

(Clergy (61%), Other Religious Workers (39%))

(n = 4 per 1000)



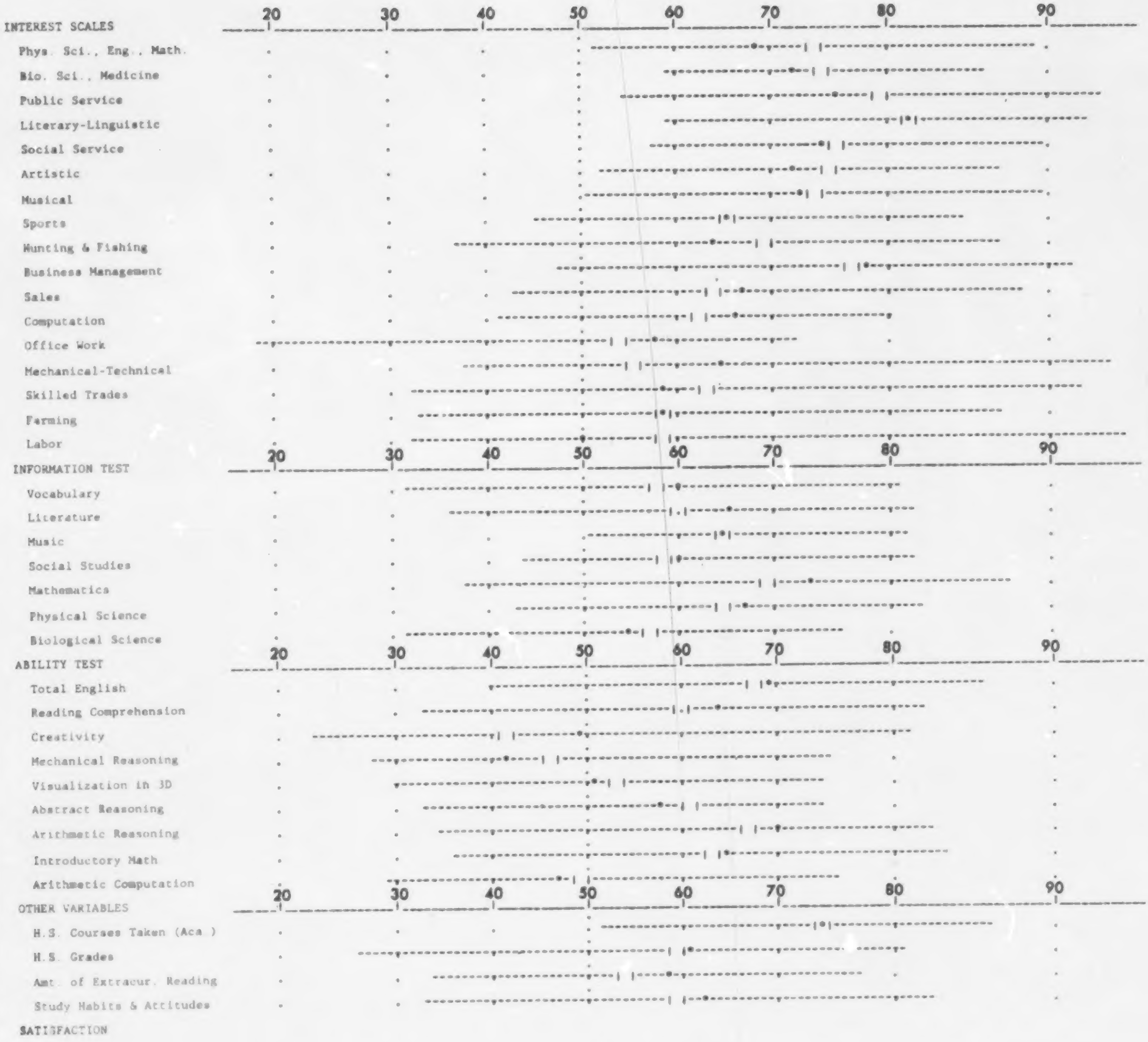
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
Interesting Work
Challenging Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Job Security
Quality of Surroundings
How Well I Can Do the Work

(* based on 88% of individuals in occupation)

COUNSELOR

(n = 2 per 1000)

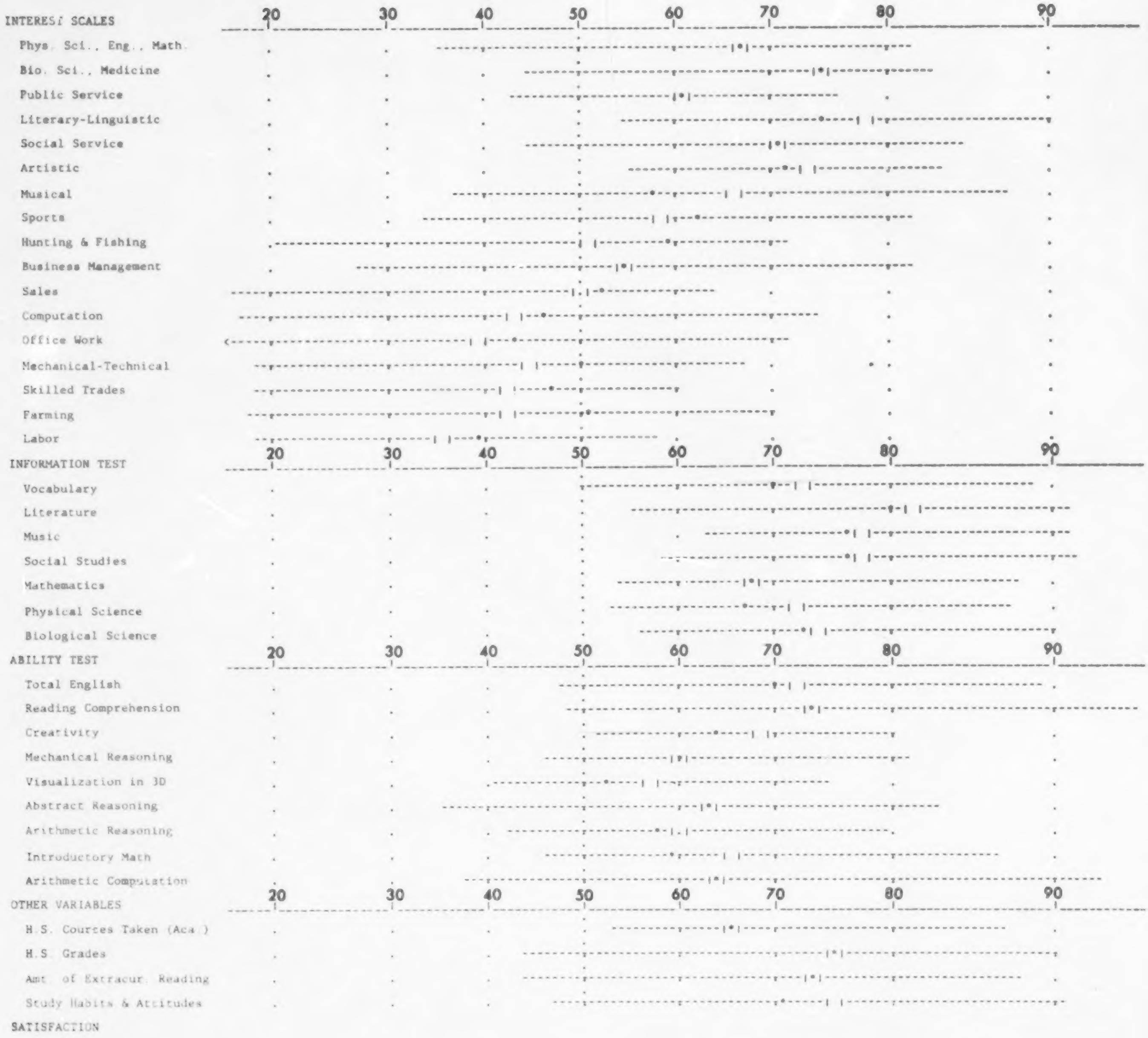


Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Length of Vacations
Income to Start

(* based on 77% of individuals in occupation)

EDUCATIONAL SPECIALIST
(e.g., educational researcher, evaluator)
(n < 1 per 1000)



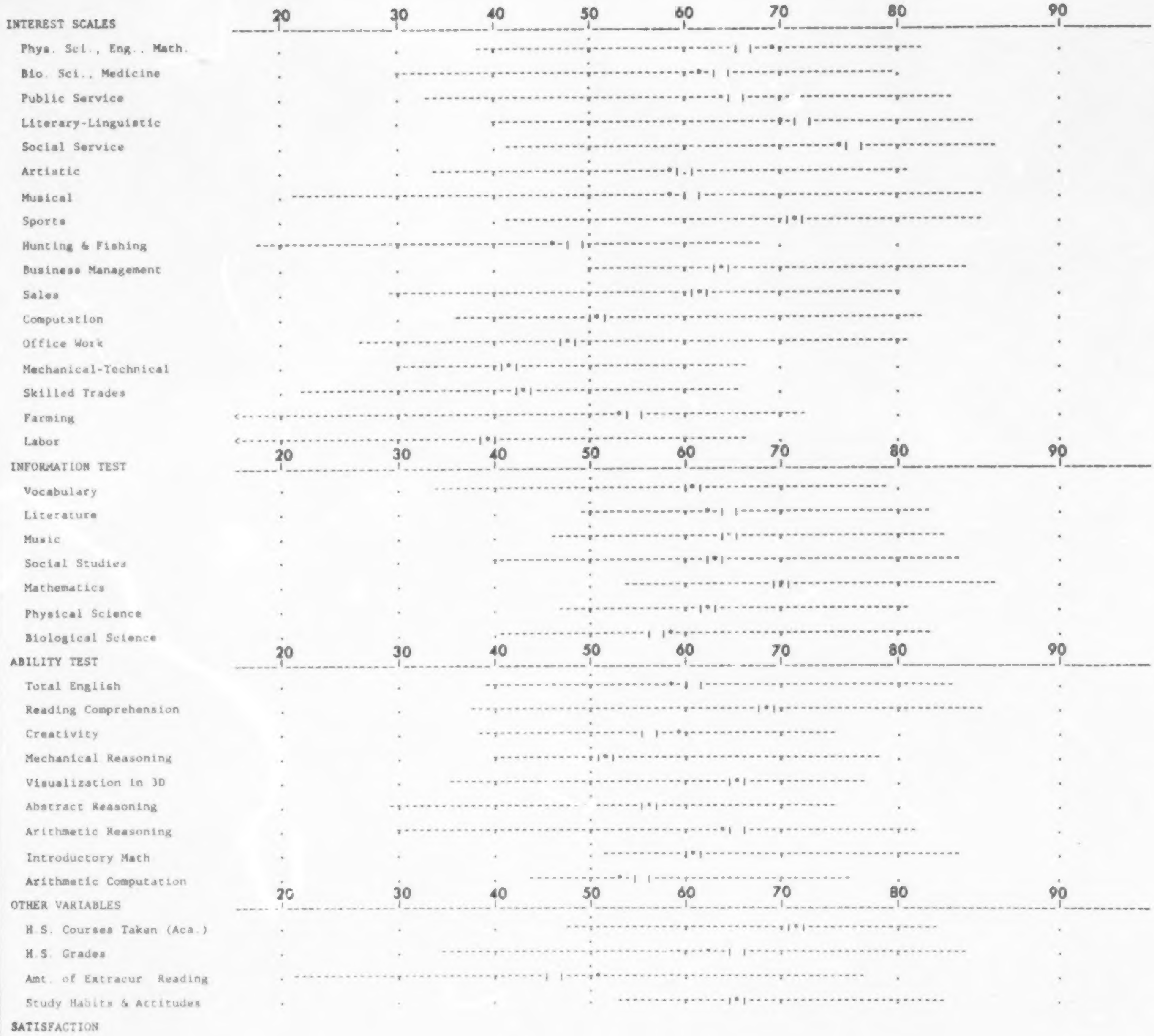
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
Interesting Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income Expected
Income to Start

(* based on 40% of individuals in occupation)

SCHOOL ADMINISTRATOR

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Importance of Work

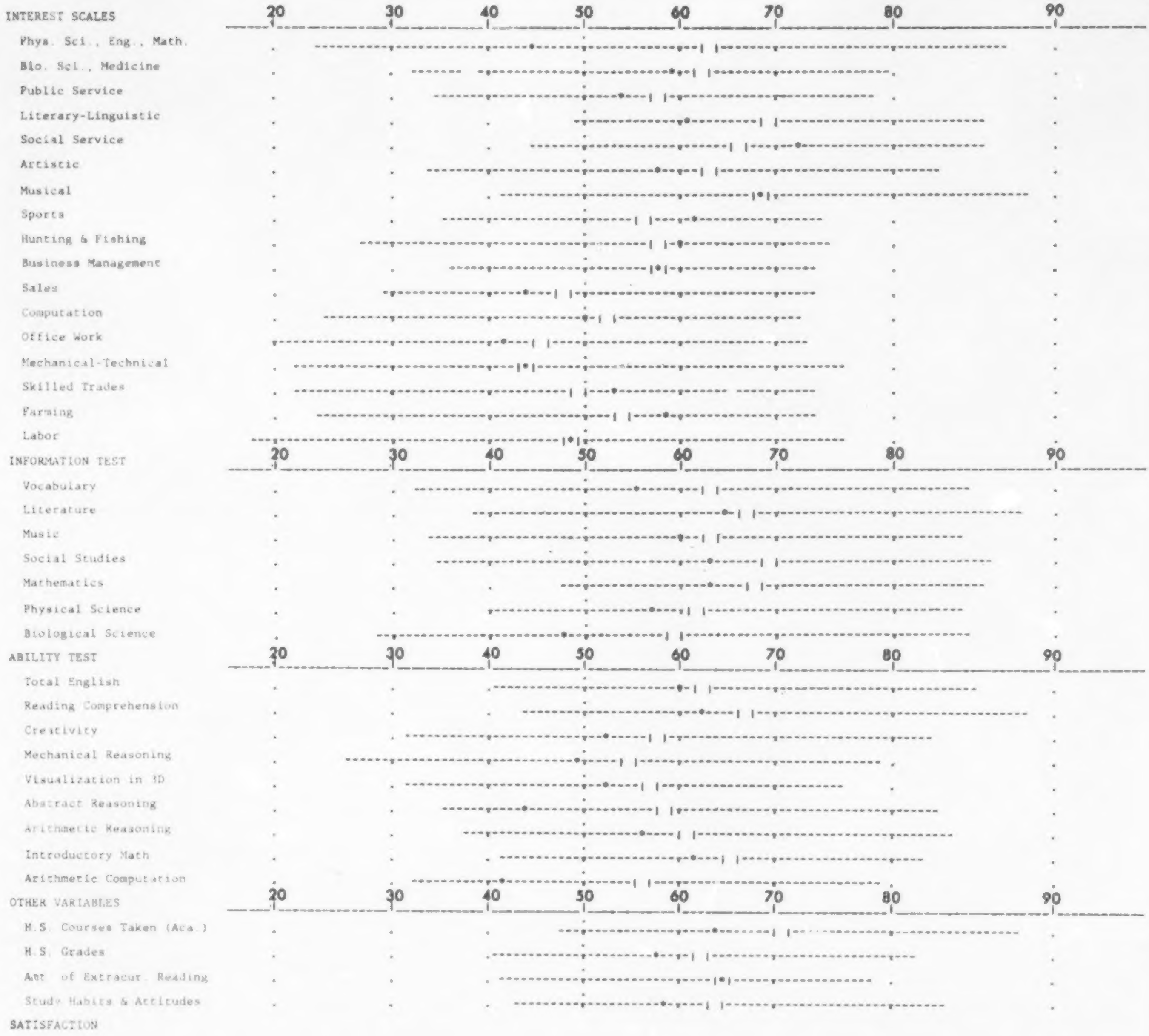
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Income Expected
Length of Vacations

(* based on 83% of individuals in occupation)

SOCIAL WORKER (INCLUDING PSYCHIATRIC SOCIAL WORKER)

(Social Worker (95%), Psychiatric Social Worker (5%))

(n = 7 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Interesting Work

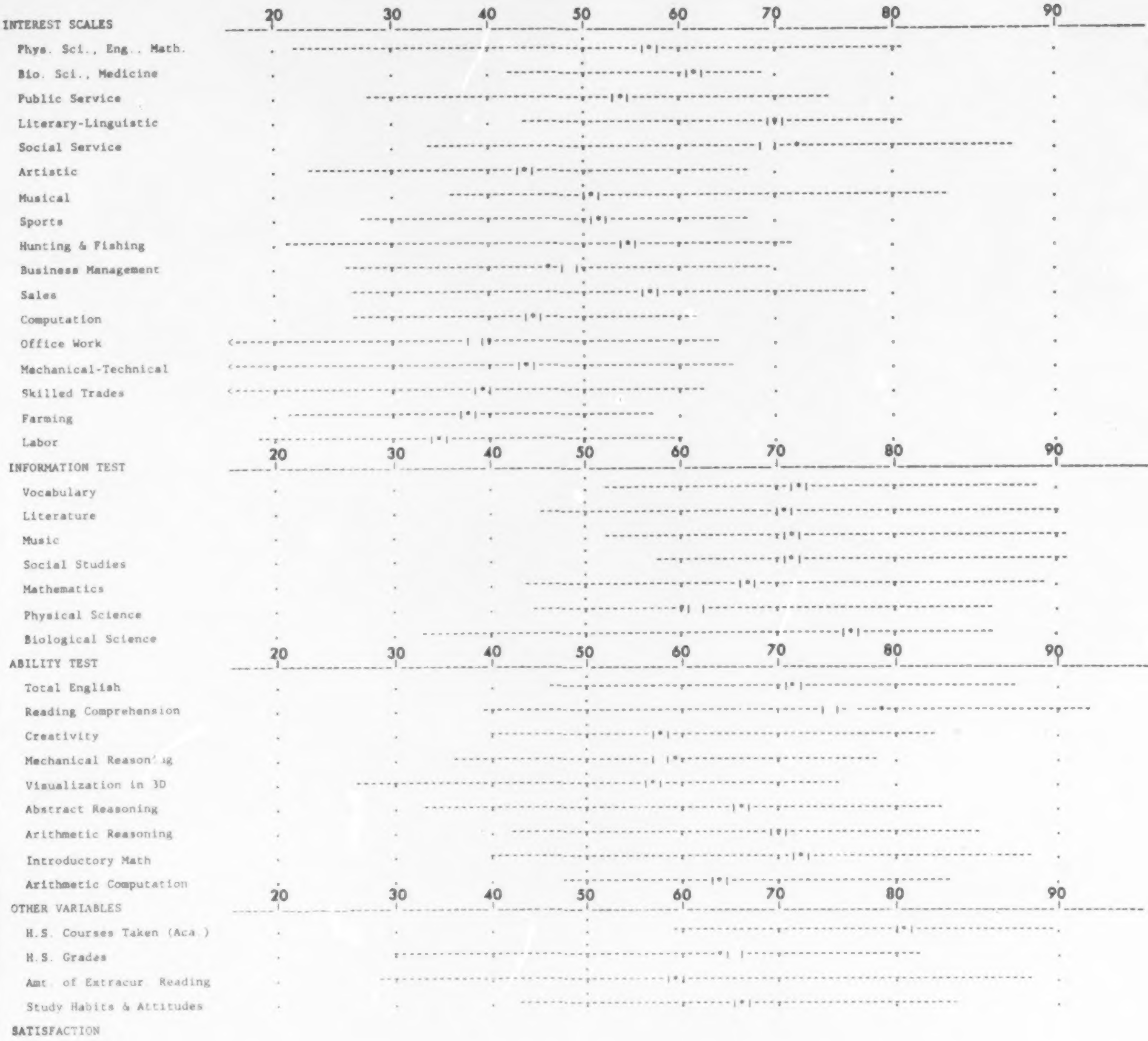
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Quality of Surroundings
Status

(* based on 70% of individuals in occupation)

SPEECH/READING SPECIALIST

(Speech Therapist (53%), Reading Specialist (40%),
Teacher: High School Speech (7%))

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
Importance of Work
How Well I Can Do the Work

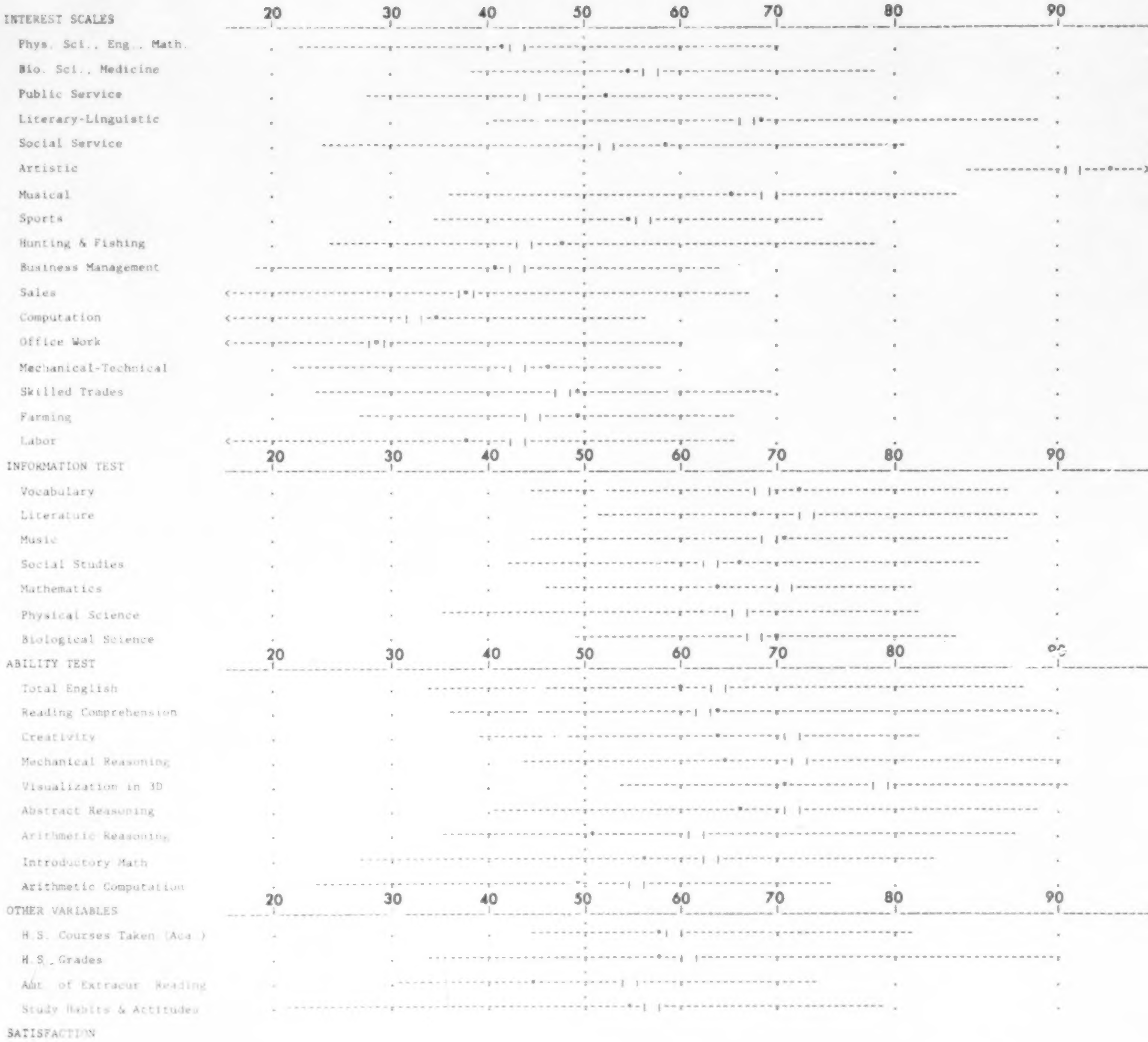
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 94% of individuals in occupation)

TEACHER: ART

(n = 2 per 1000)



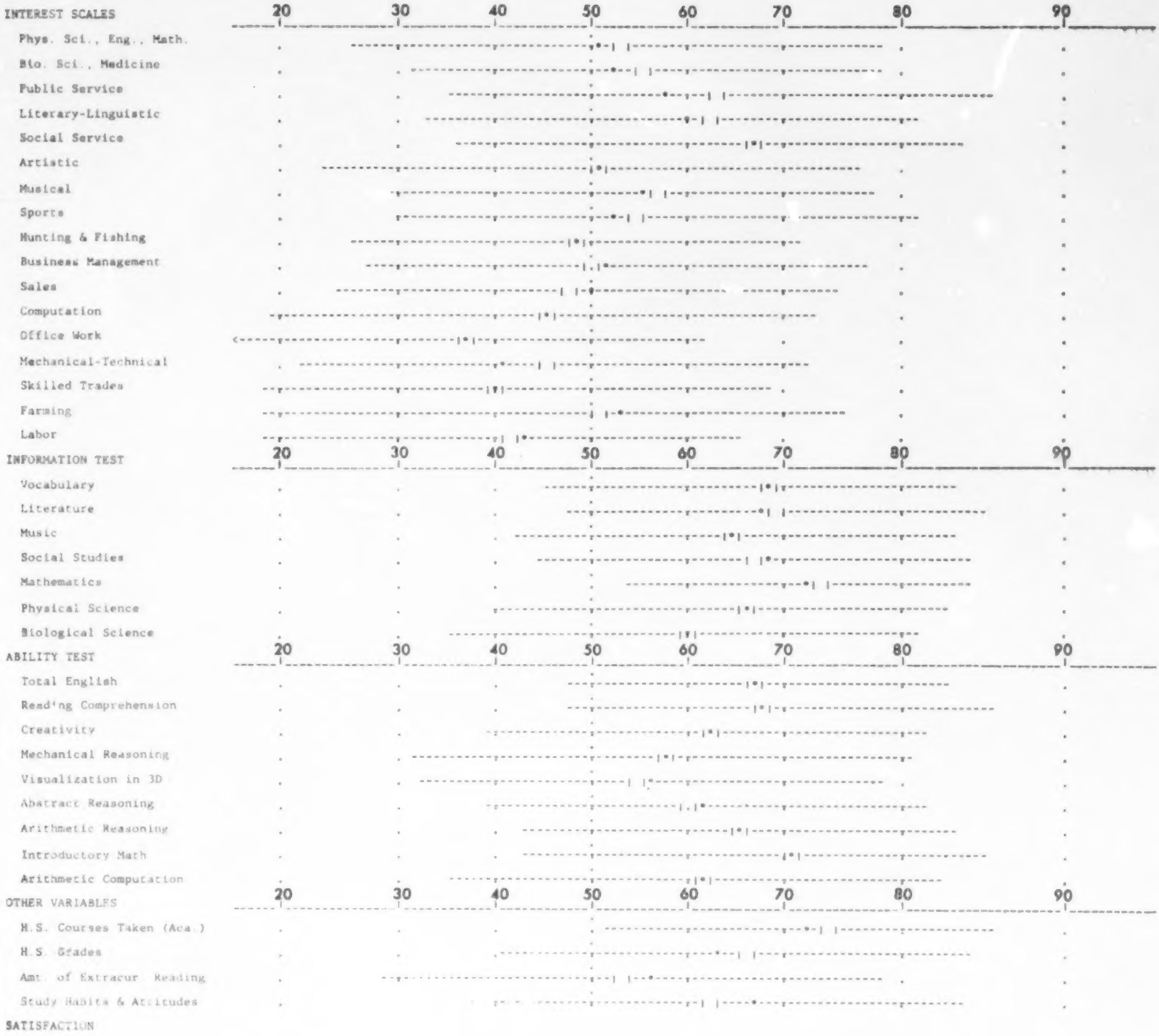
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Length of Vacations
How Well I Can Do the Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Status

(* based on 67% of individuals in occupation)

TEACHER: ELEMENTARY SCHOOL

(n = 14 per 1000)



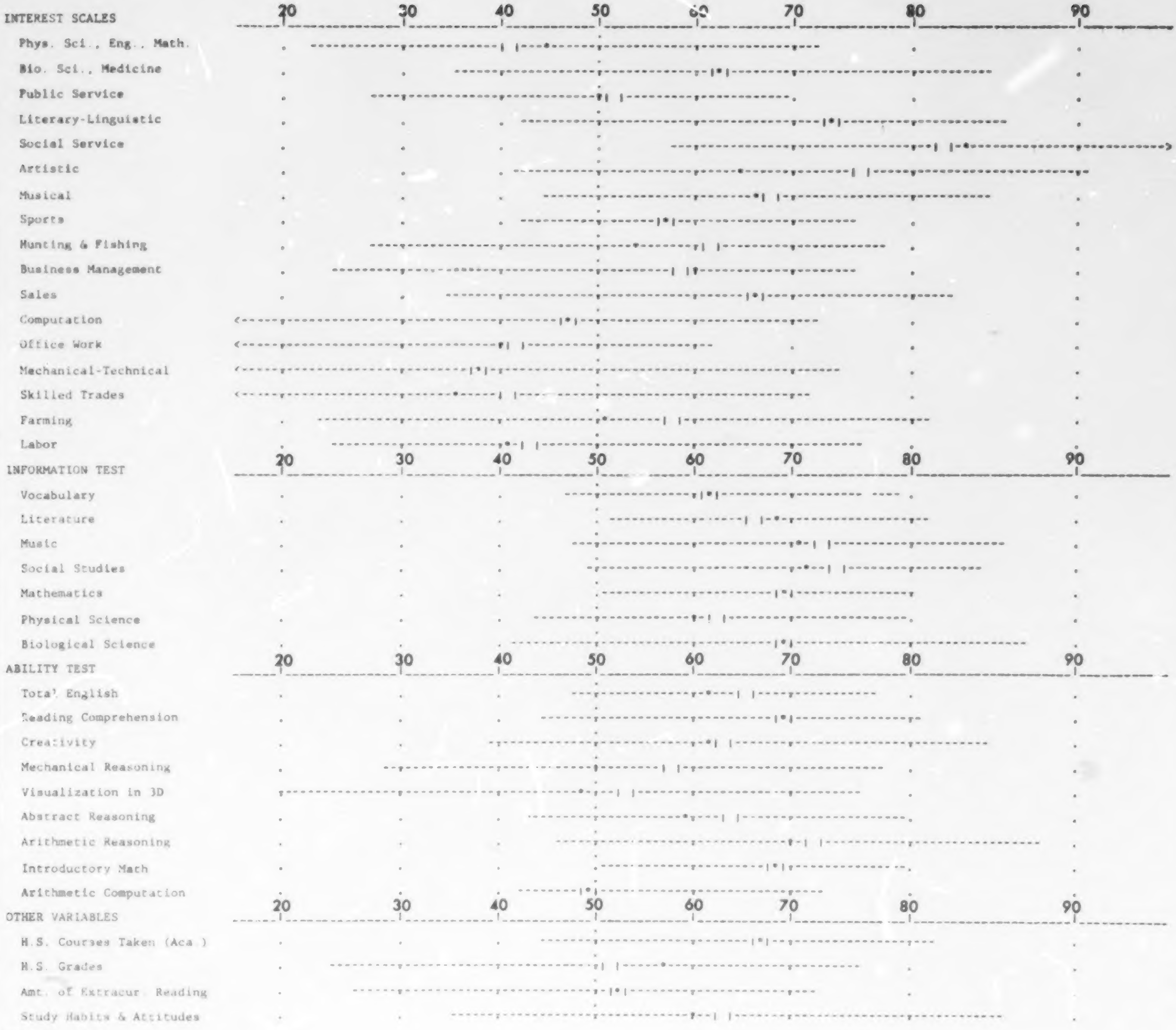
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
Length of Vacations
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 76% of individuals in occupation)

TEACHER OF THE HANDICAPPED

(n = 2 per 1000)



SATISFACTION

Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
Importance of Work
Interesting Work

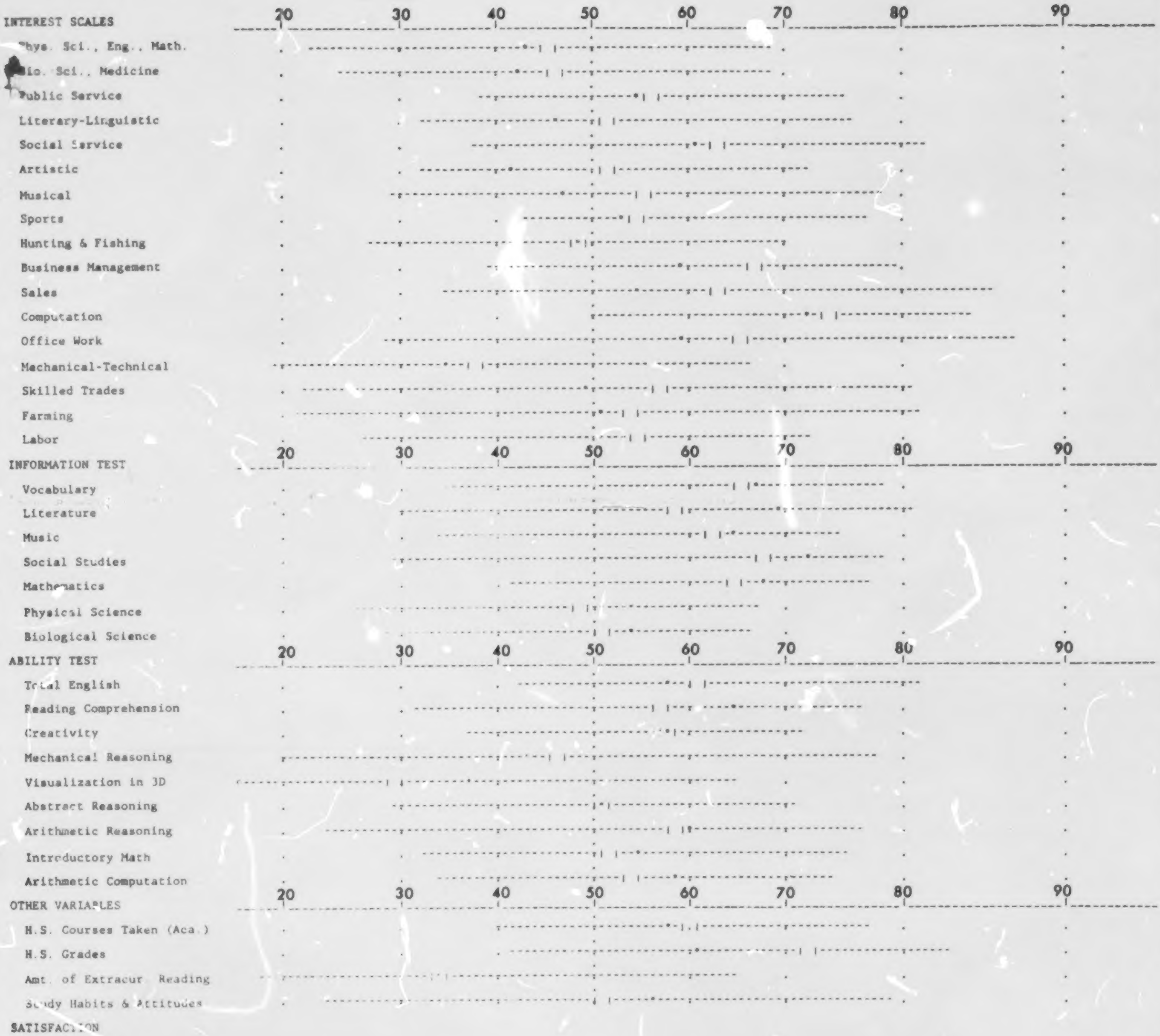
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 78% of individuals in occupation)

TEACHER: HIGH SCHOOL COMMERCIAL EDUCATION

(n = 1 per 1000)



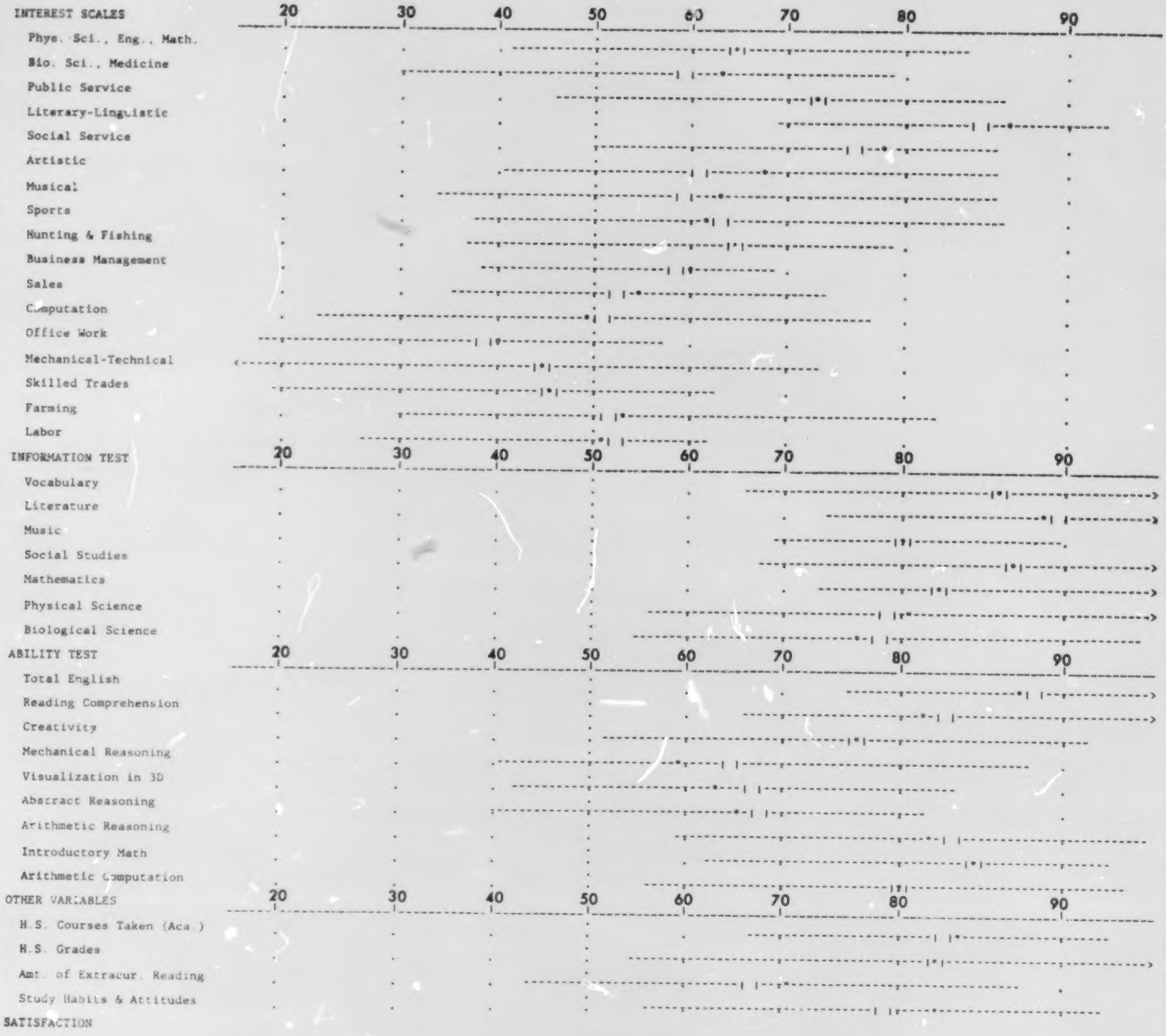
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
Importance of Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Power
Income to Start*

(* based on 49% of individuals in occupation)

TEACHER: HIGH SCHOOL ENGLISH

(n = 4 per 1000)



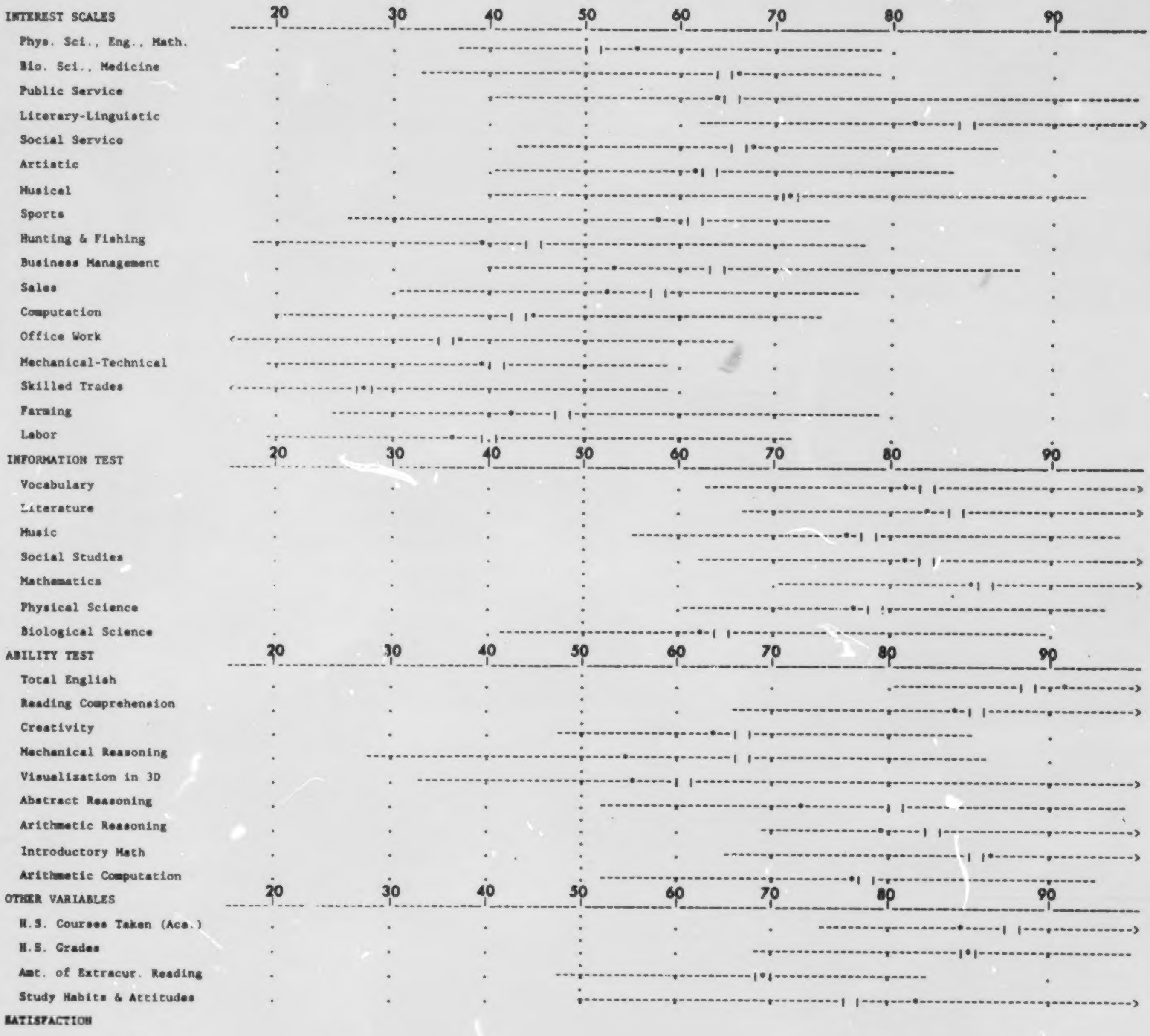
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Length of Vacations
Relationship of Work to Prior Training
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 83% of individuals in occupation)

TEACHER: HIGH SCHOOL FOREIGN LANGUAGE

(n < 1 per 1000)



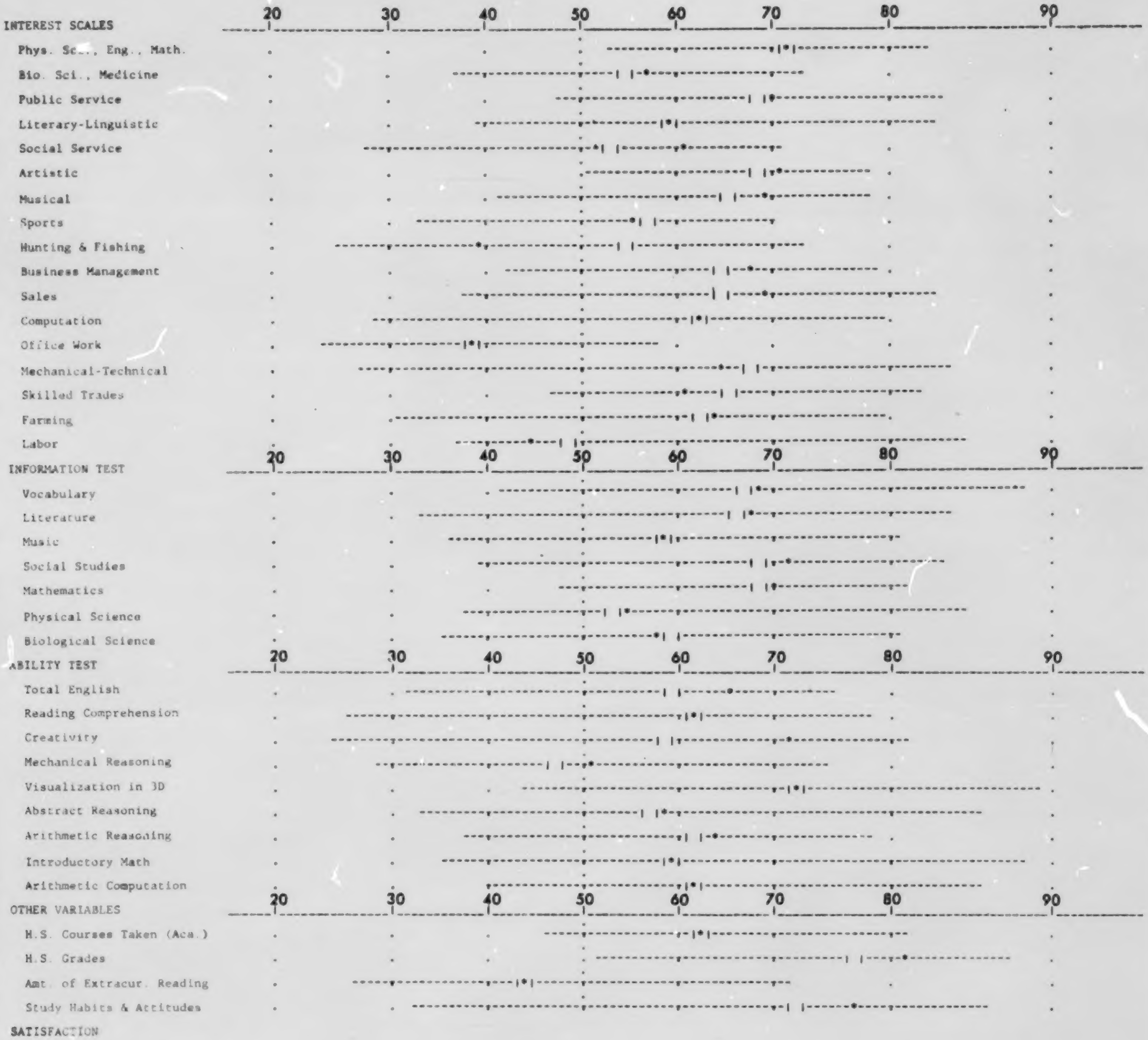
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Length of Vacations
Relationship of Work to Prior Training
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 75% of individuals in occupation)

TEACHER: HIGH SCHOOL HOME ECONOMICS

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
Length of Vacations
Interesting Work

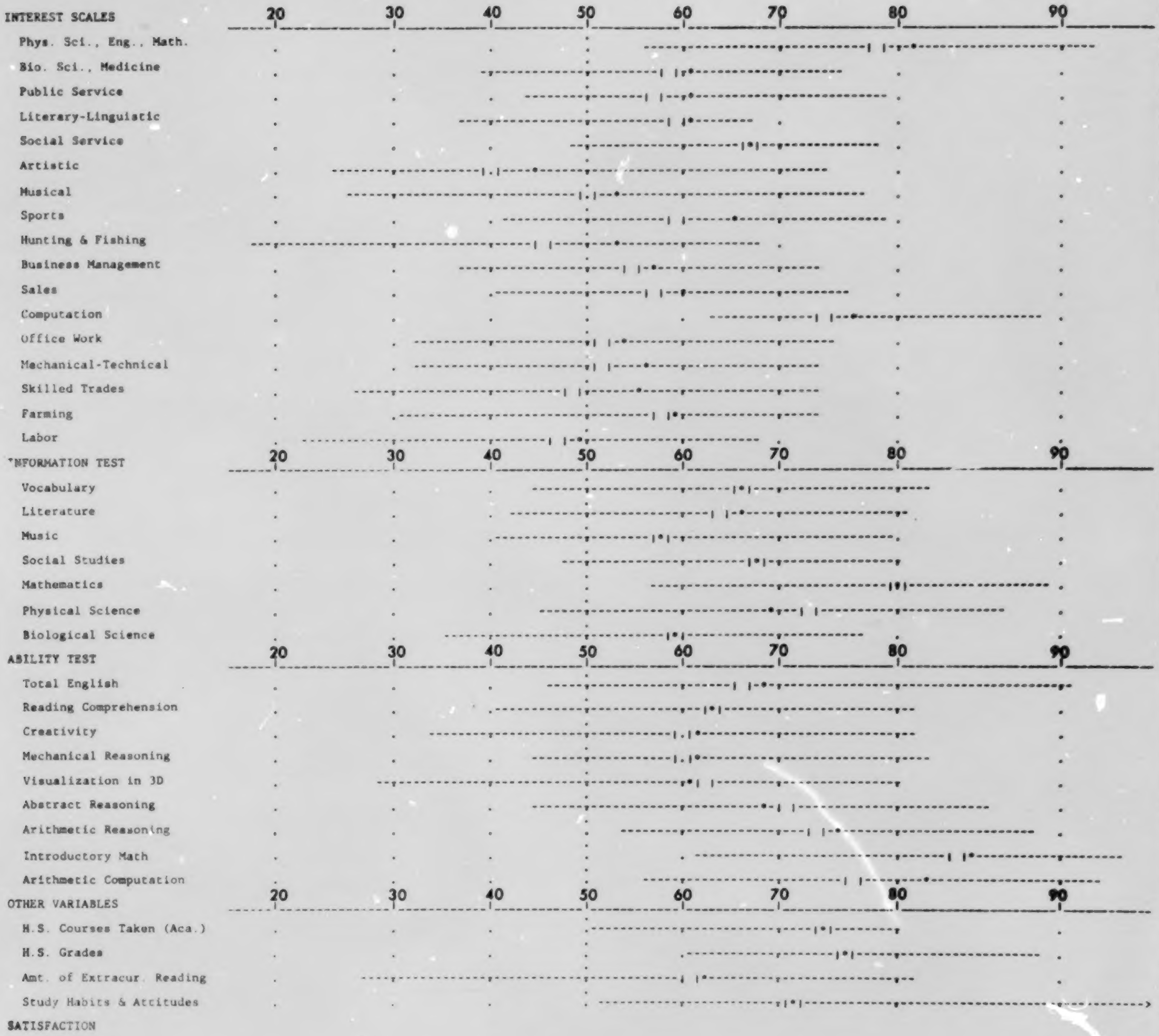
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income Expected
Length of Work Week

(* based on 53% of individuals in occupation)

TEACHER: HIGH SCHOOL MATHEMATICS

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Importance of Work
Relationship of Work to Prior Training
How Well I Can Do the Work

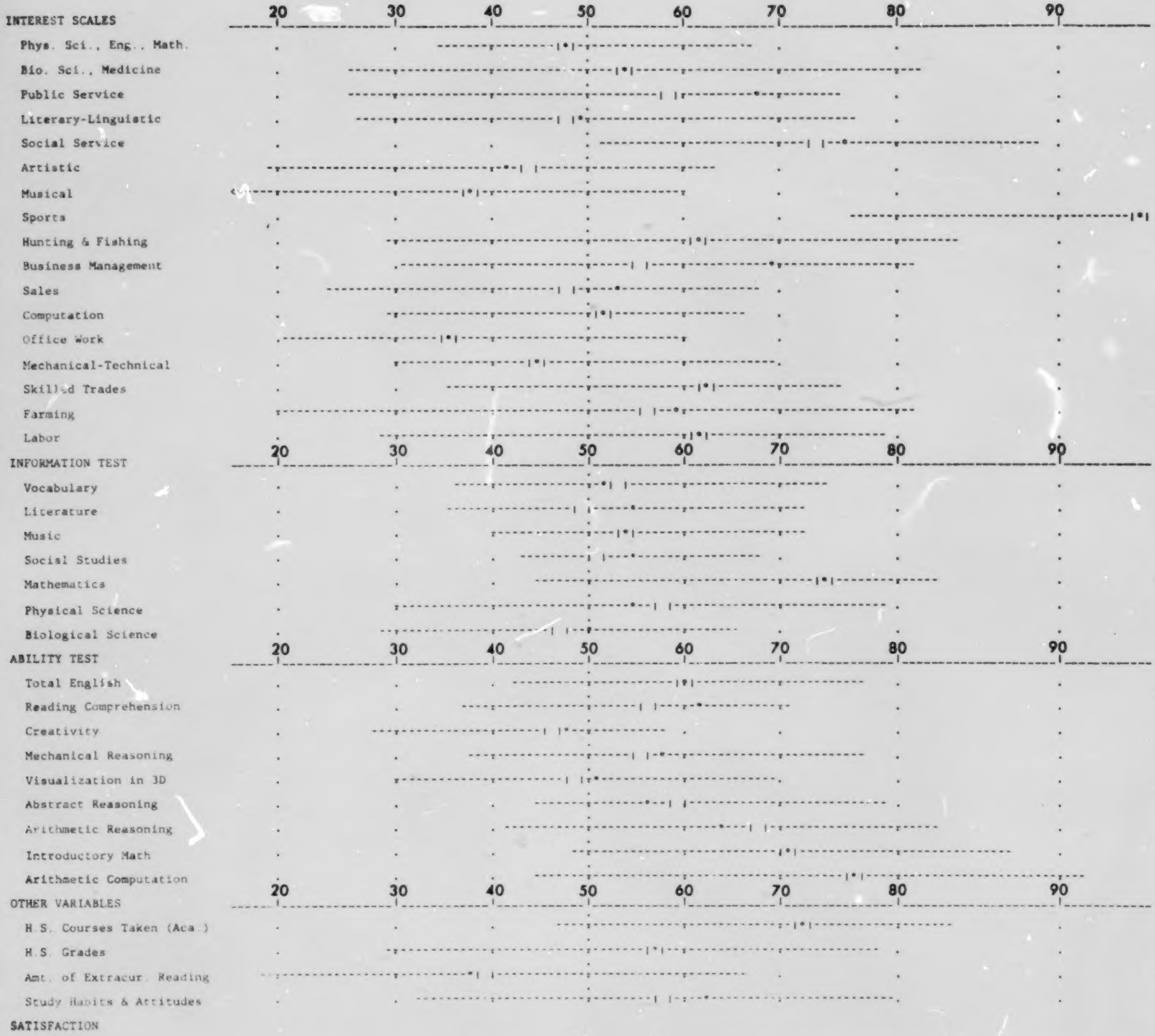
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Opportunity to Advance
Income Expected

(* based on 81% of individuals in occupation)

TEACHER: HIGH SCHOOL PHYSICAL EDUCATION

(n = 2 per 1000)



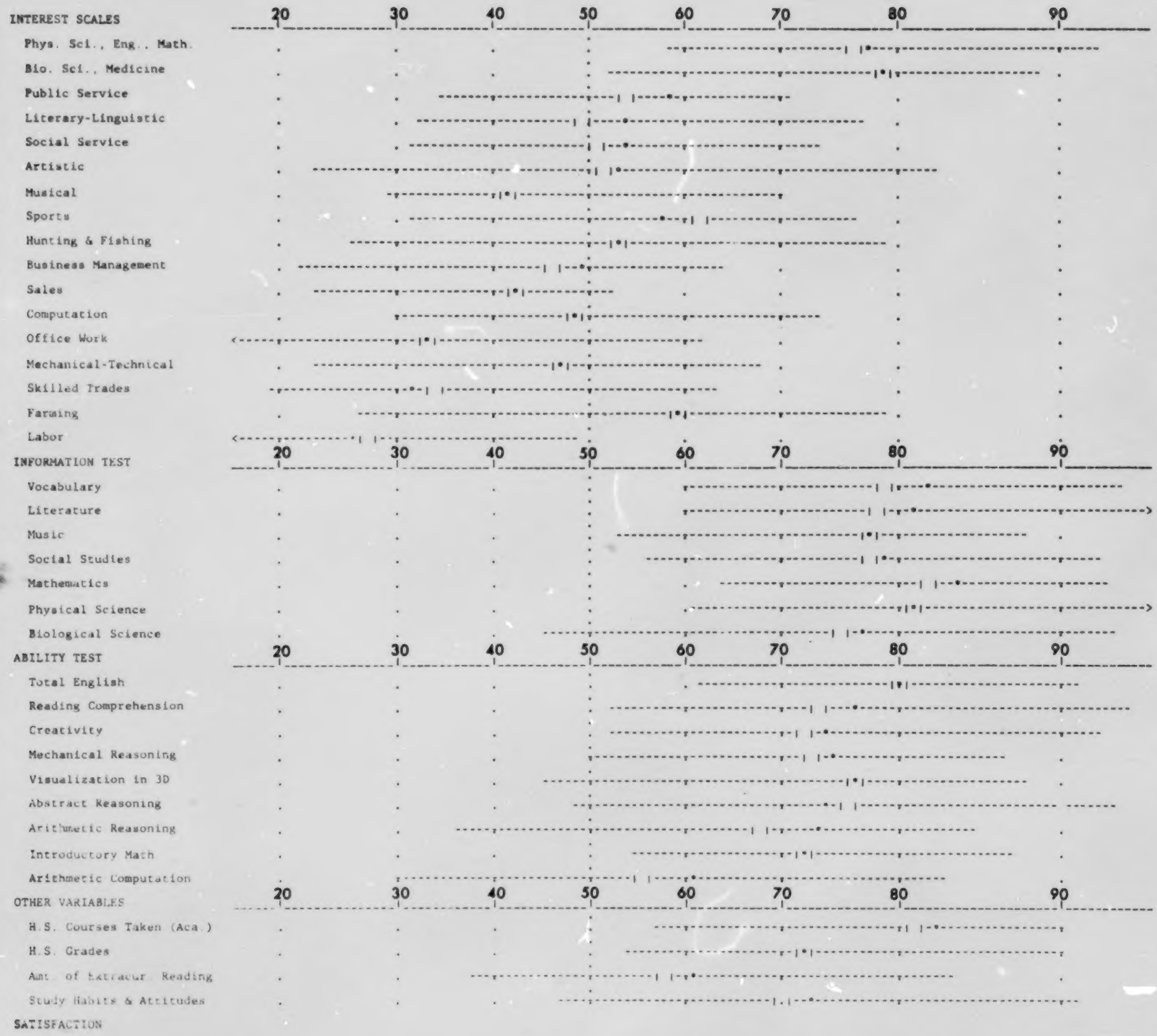
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Relationship of Work to Prior Training
How Well I Can Do the Work
Importance of Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 77% of individuals in occupation)

TEACHER: HIGH SCHOOL SCIENCE

(n = 3 per 1000)



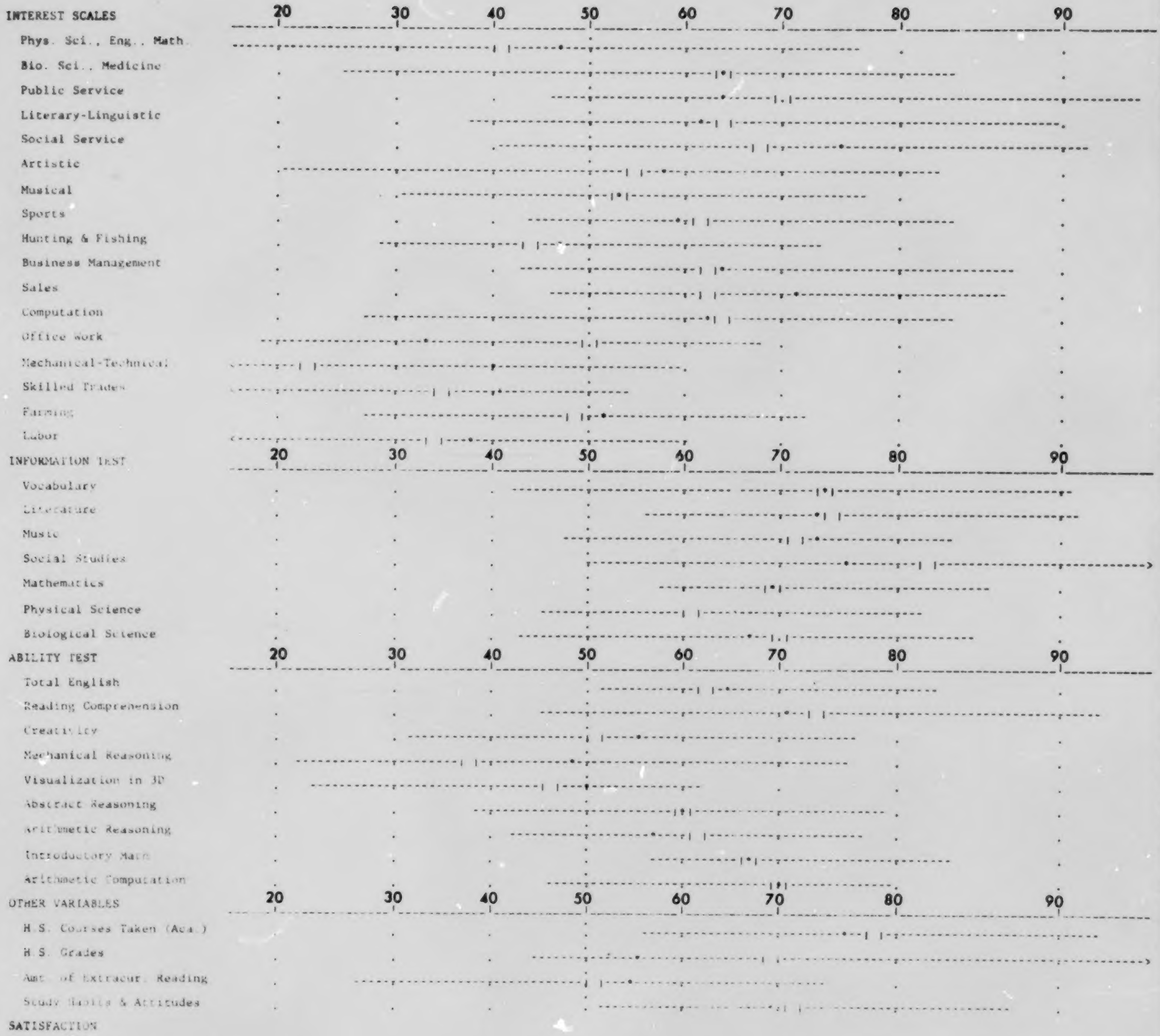
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Length of Vacations
Importance of Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Income Expected

(* based on 79% of individuals in occupation)

TEACHER: HIGH SCHOOL SOCIAL STUDIES

(n = 4 per 1000)



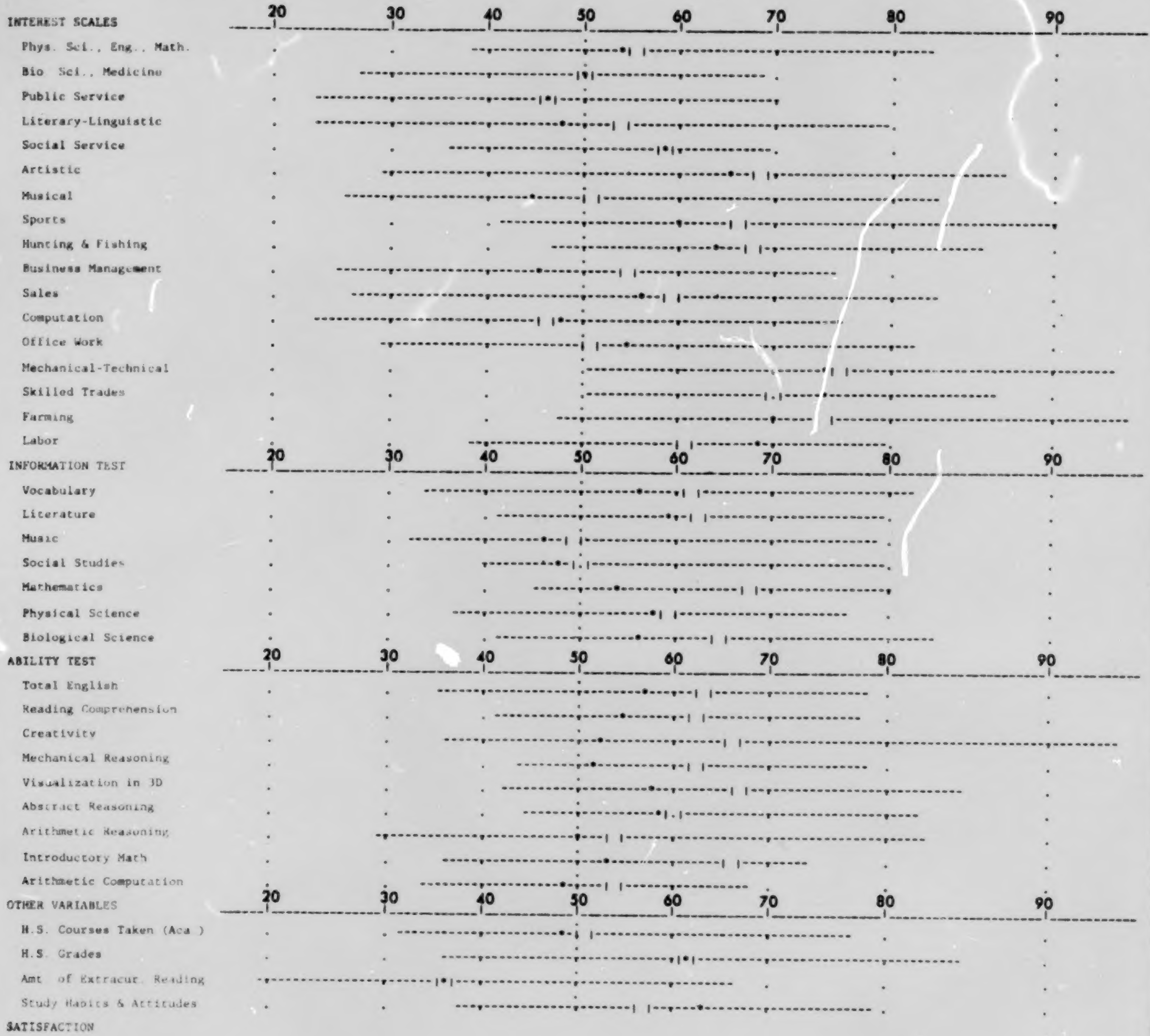
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Length of Vacations
Relationship of Work to Prior Training
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 56% of individuals in occupation)

TEACHER: HIGH SCHOOL TRADE/INDUSTRIAL EDUCATION

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
How Well I Can Do the Work
Length of Vacations

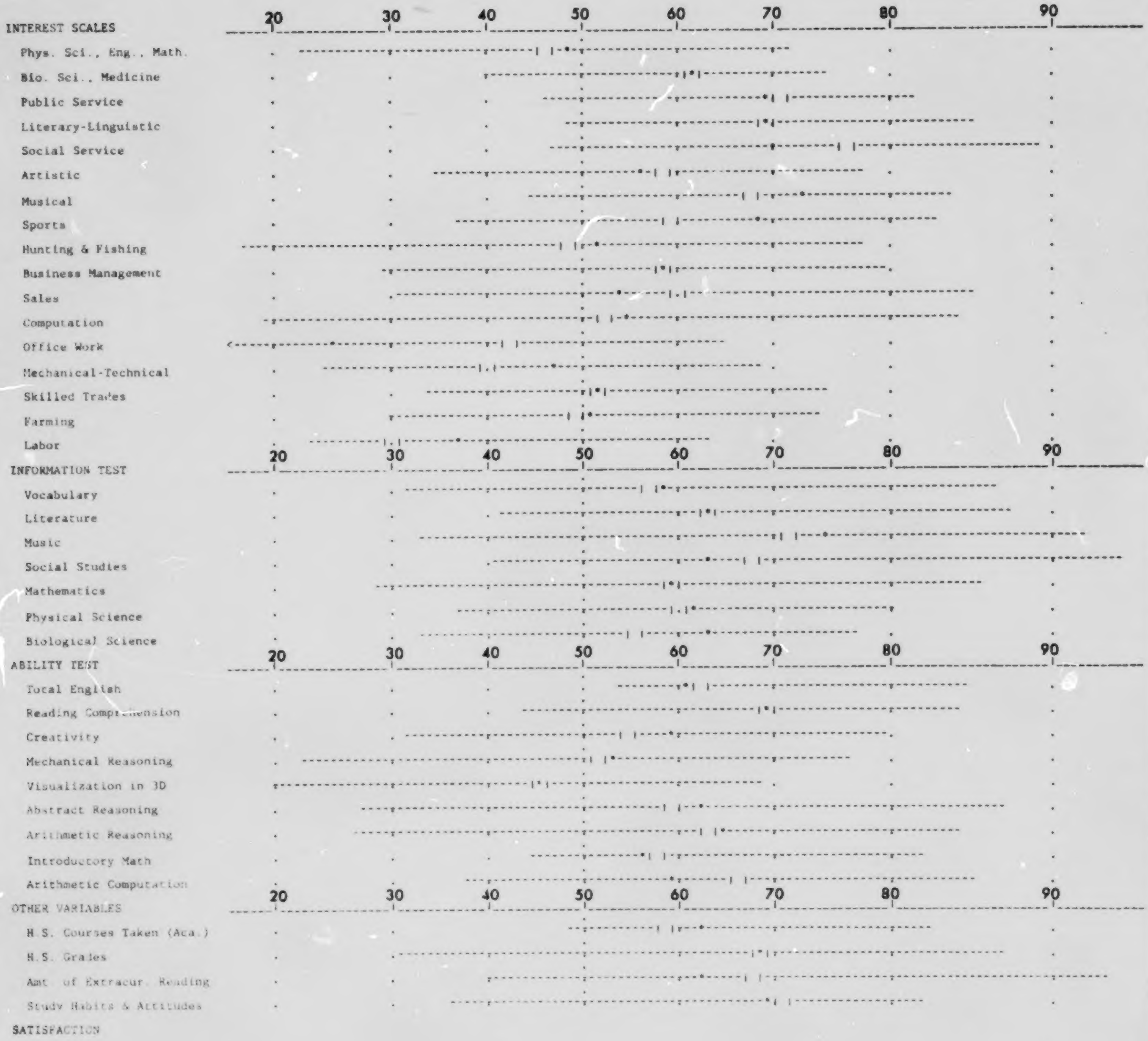
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Status

(* based on 65% of individuals in occupation)

TEACHER: HIGH SCHOOL (OTHER SUBJECTS)

(n = 3 per 1000)



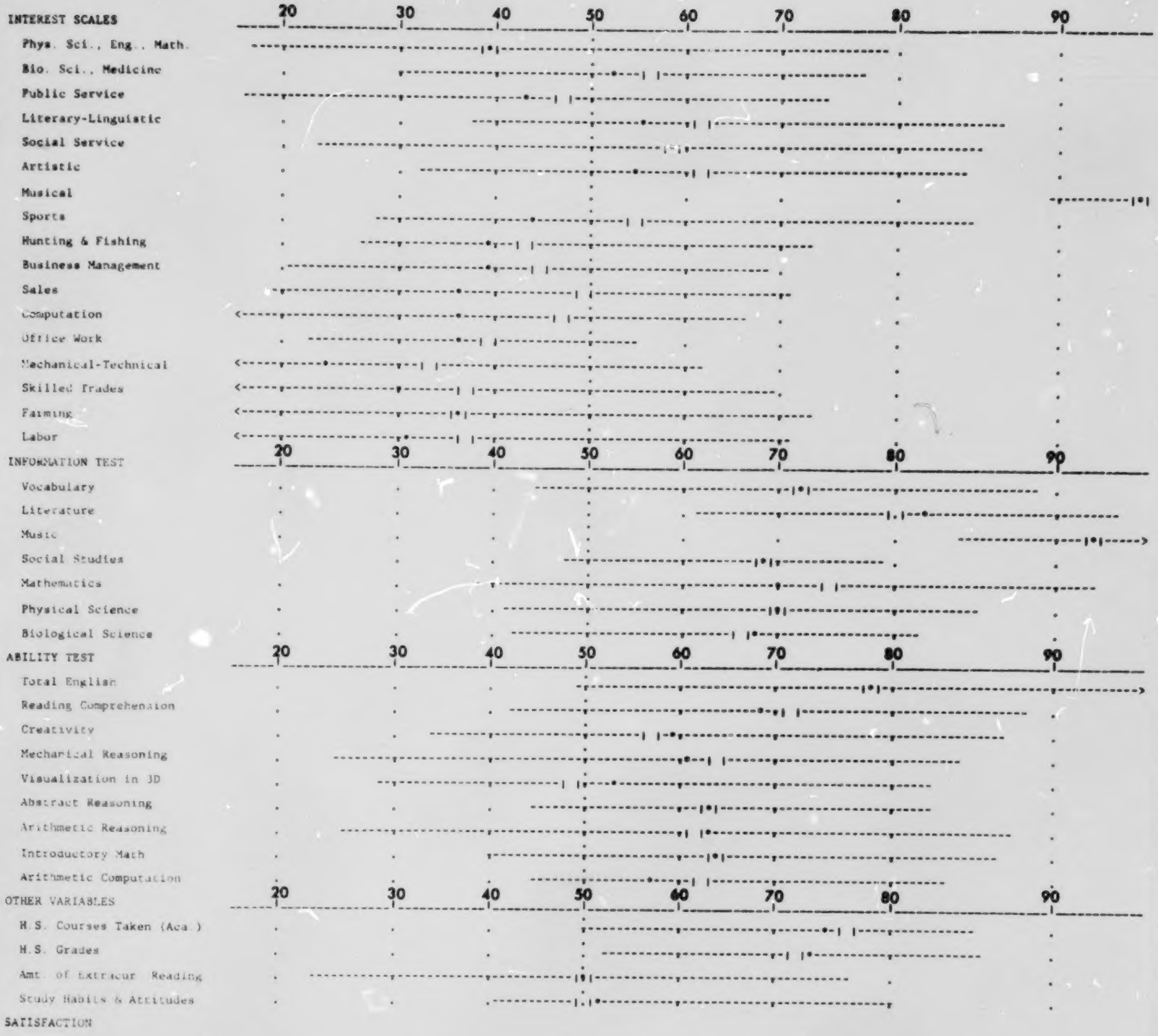
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Interesting Work
Importance of Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income Expected
Status

(* based on 71% of individuals in occupation)

TEACHER: MUSIC

(n = 4 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Relationship of Work to Prior Training
Importance of Work

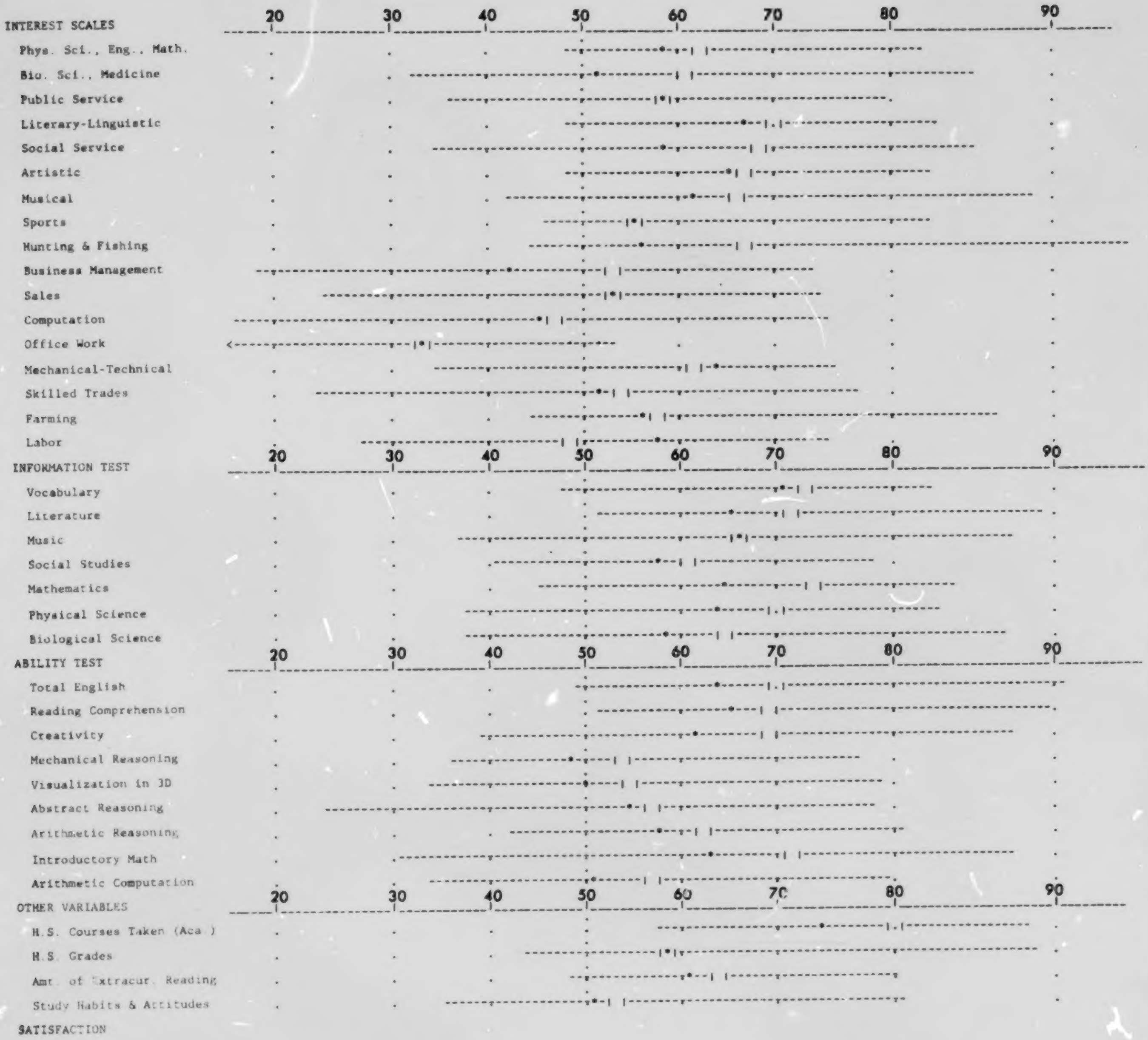
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Income Expected
Opportunity to Advance

(* based on 67% of individuals in occupation)

TEACHER: PRESCHOOL

(n = 3 per 1000)



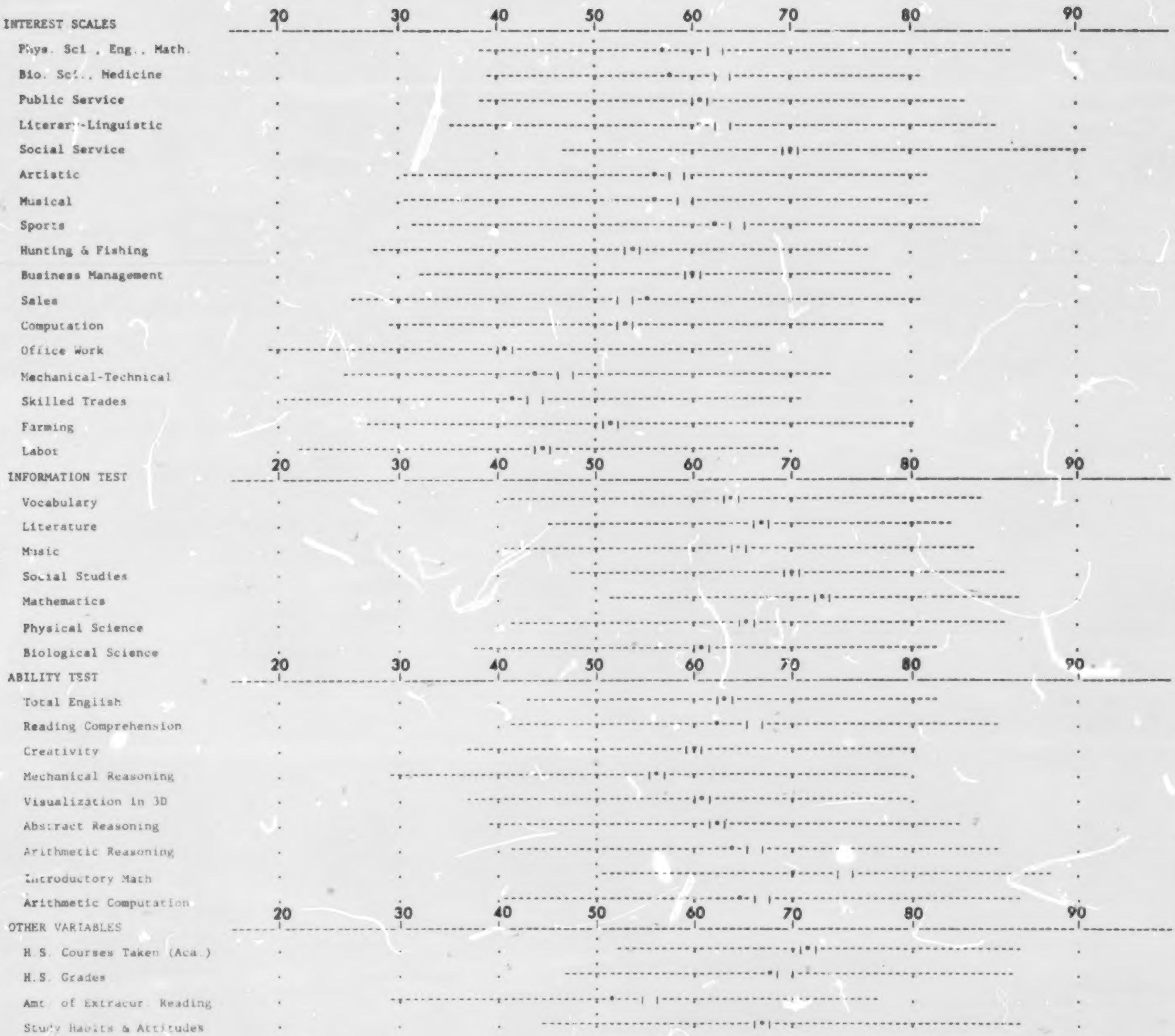
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 73% of individuals in occupation)

TEACHER (NOT ELSEWHERE CLASSIFIED)

(n = 7 per 1000)



TISFACTION

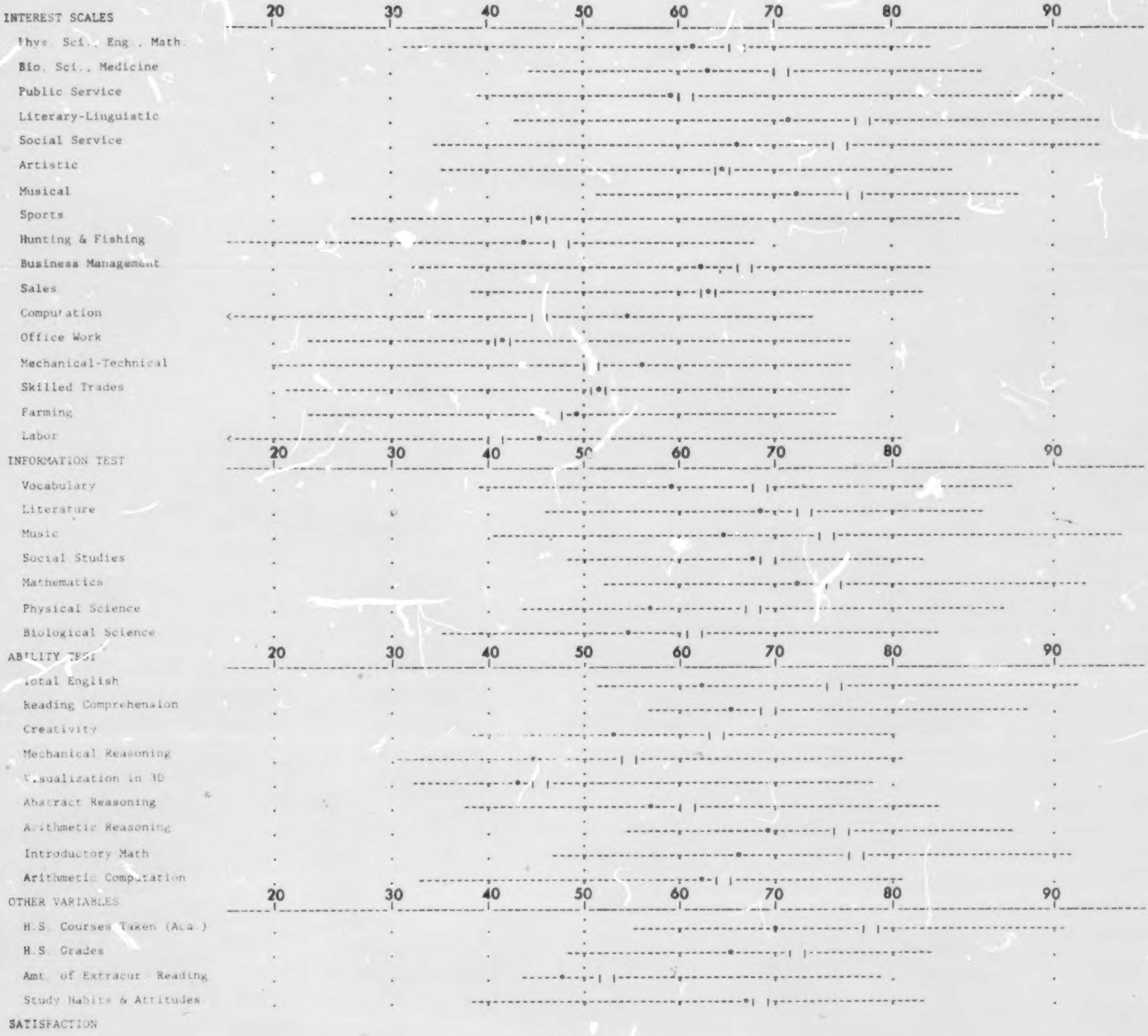
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Length of Vacations
Importance of Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 67% of individuals in occupation)

VOCATIONAL COUNSELOR

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Friendliness of Co-workers
Importance of Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income Expected
Income to Start

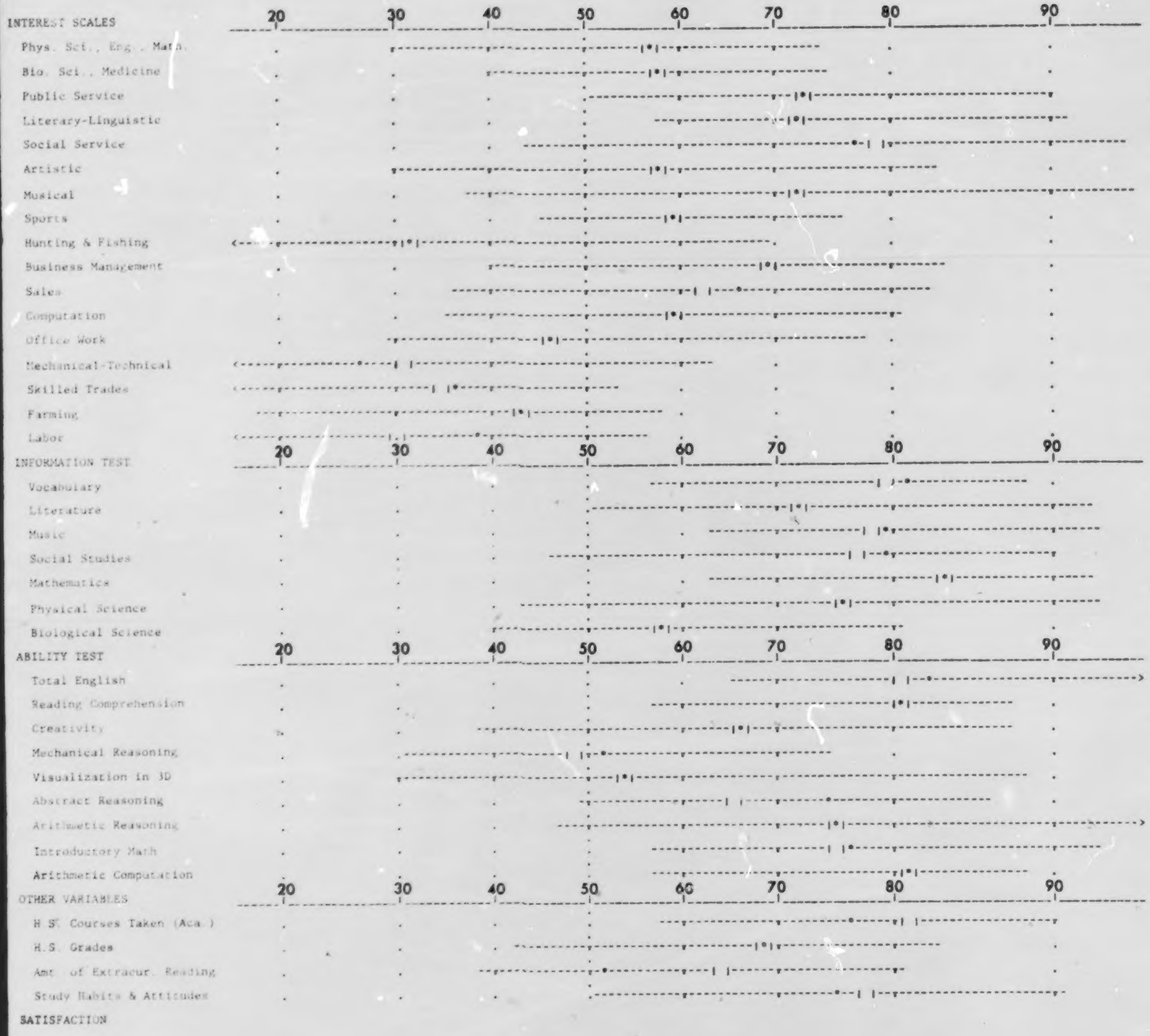
(* based on 62% of individuals in occupation)

CAREER GROUP 5

HUMANITIES, LAW, SOCIAL AND BEHAVIORAL SCIENCES

COLLEGE ADMINISTRATOR

(n = 1 per 1000)



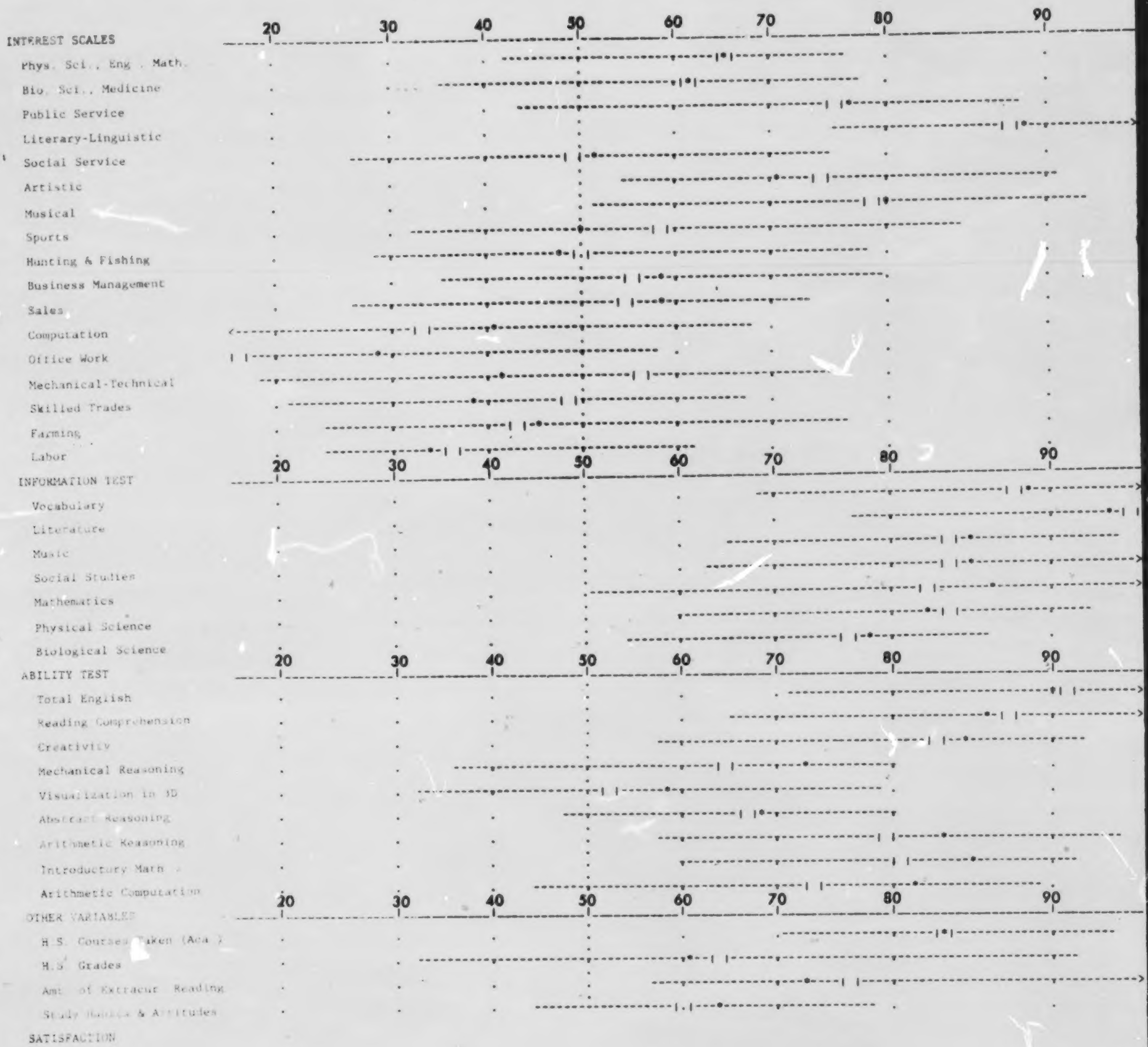
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Power
Length of Vacations

(* based on 62% of individuals in occupation)

EDITOR

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Interesting Work
Challenging Work

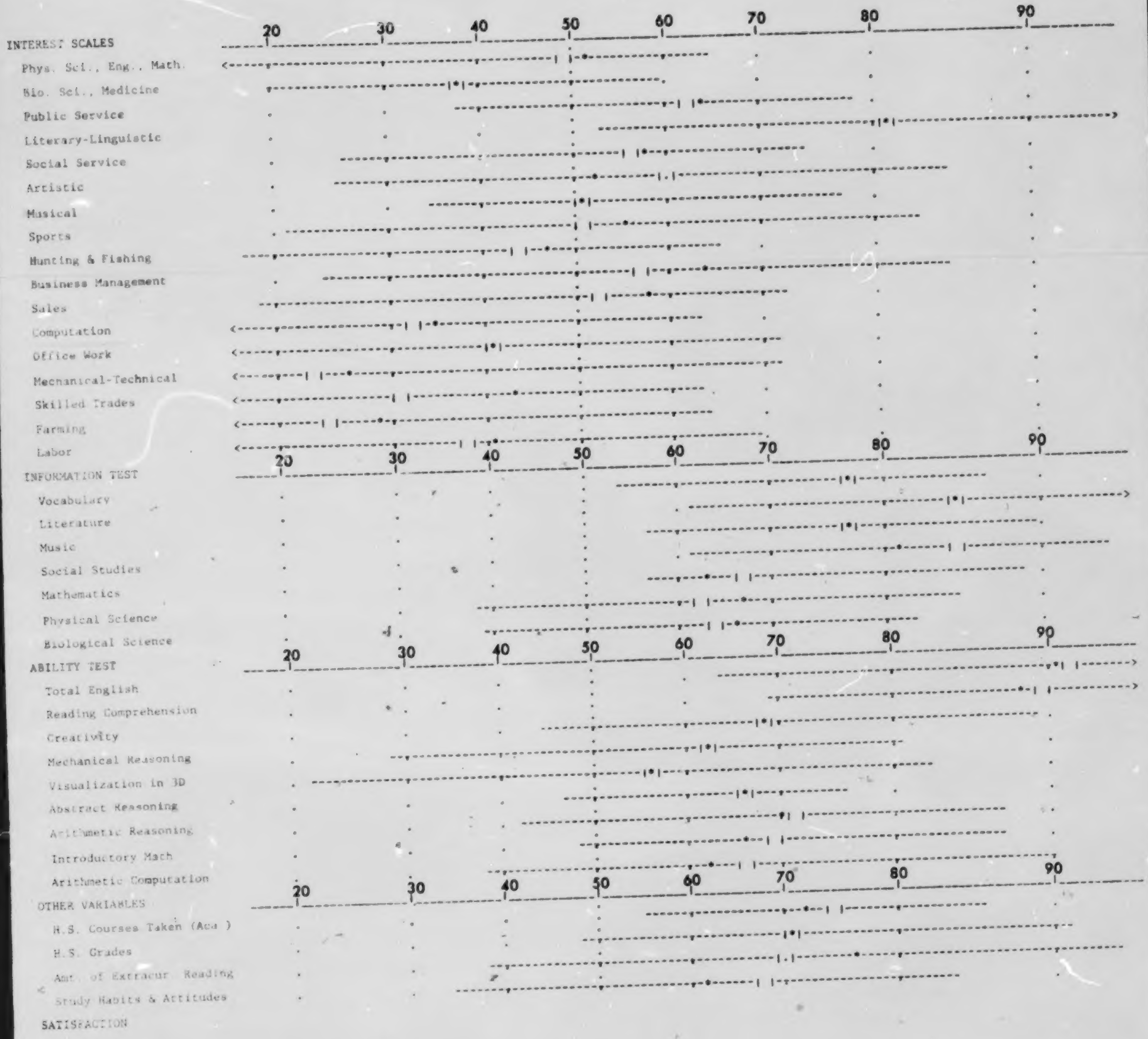
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Length of Vacations
Opportunity to Advance
Power

(* based on 29% of individuals in occupation)

JOURNALIST

(n < 1 per 1000)



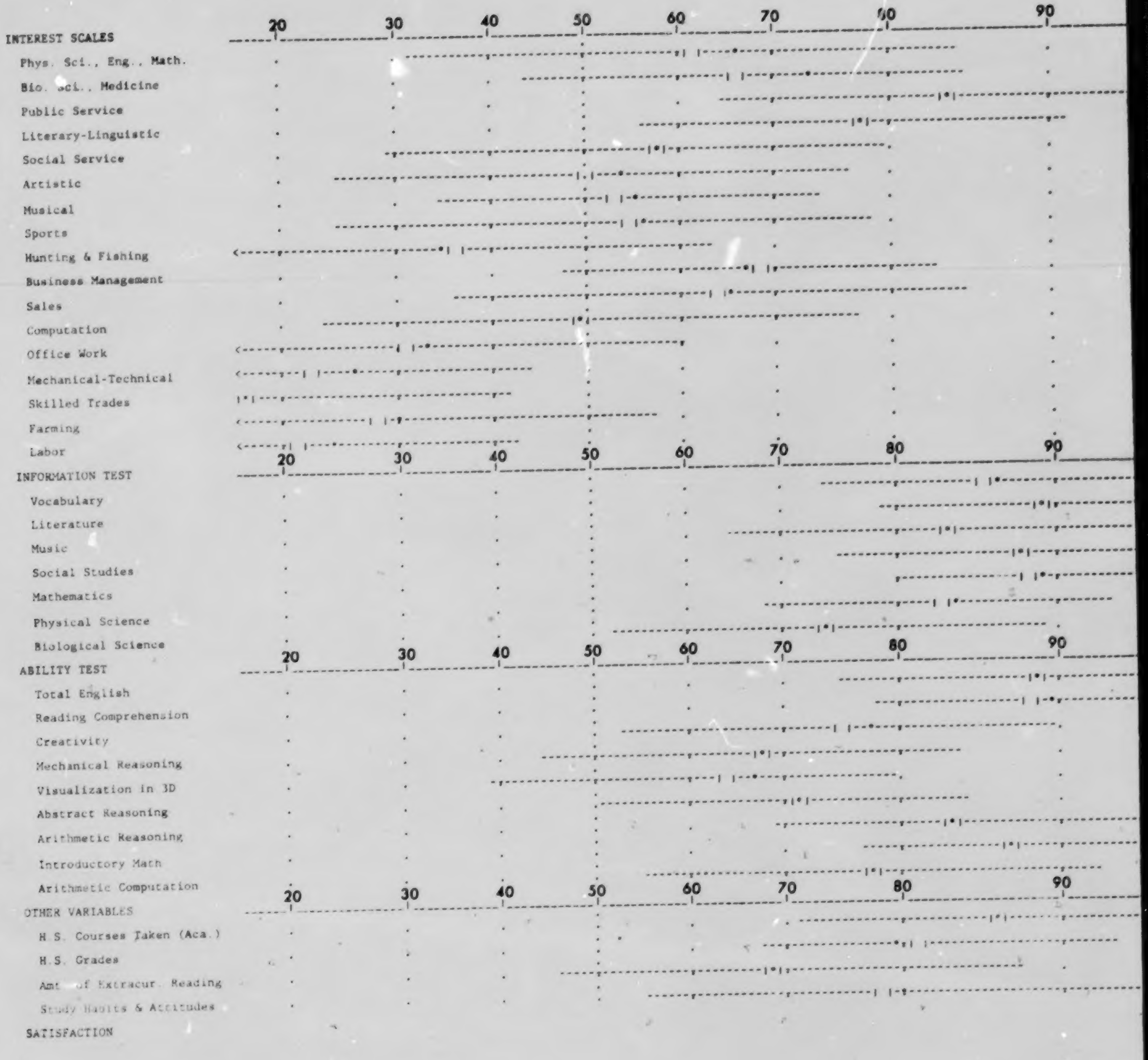
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Income to Start

(* based on 79% of individuals in occupation)

LAWYER

(n = 5 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
How Well I Can Do the Work
Challenging Work

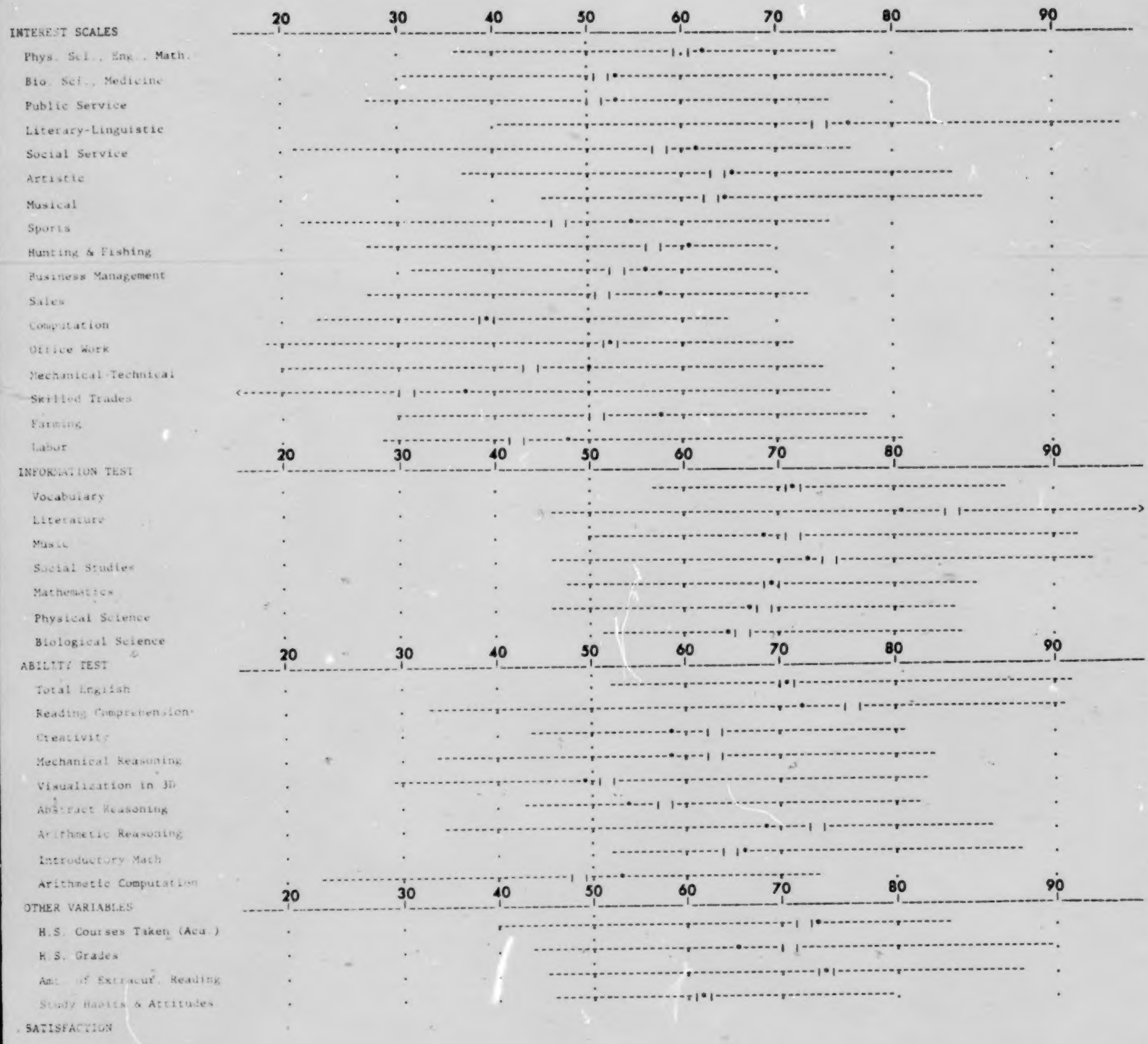
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Quality of Surroundings
Status

(* based on 76% of individuals in occupation)

LIBRARIAN

(n = 2 per 1000)



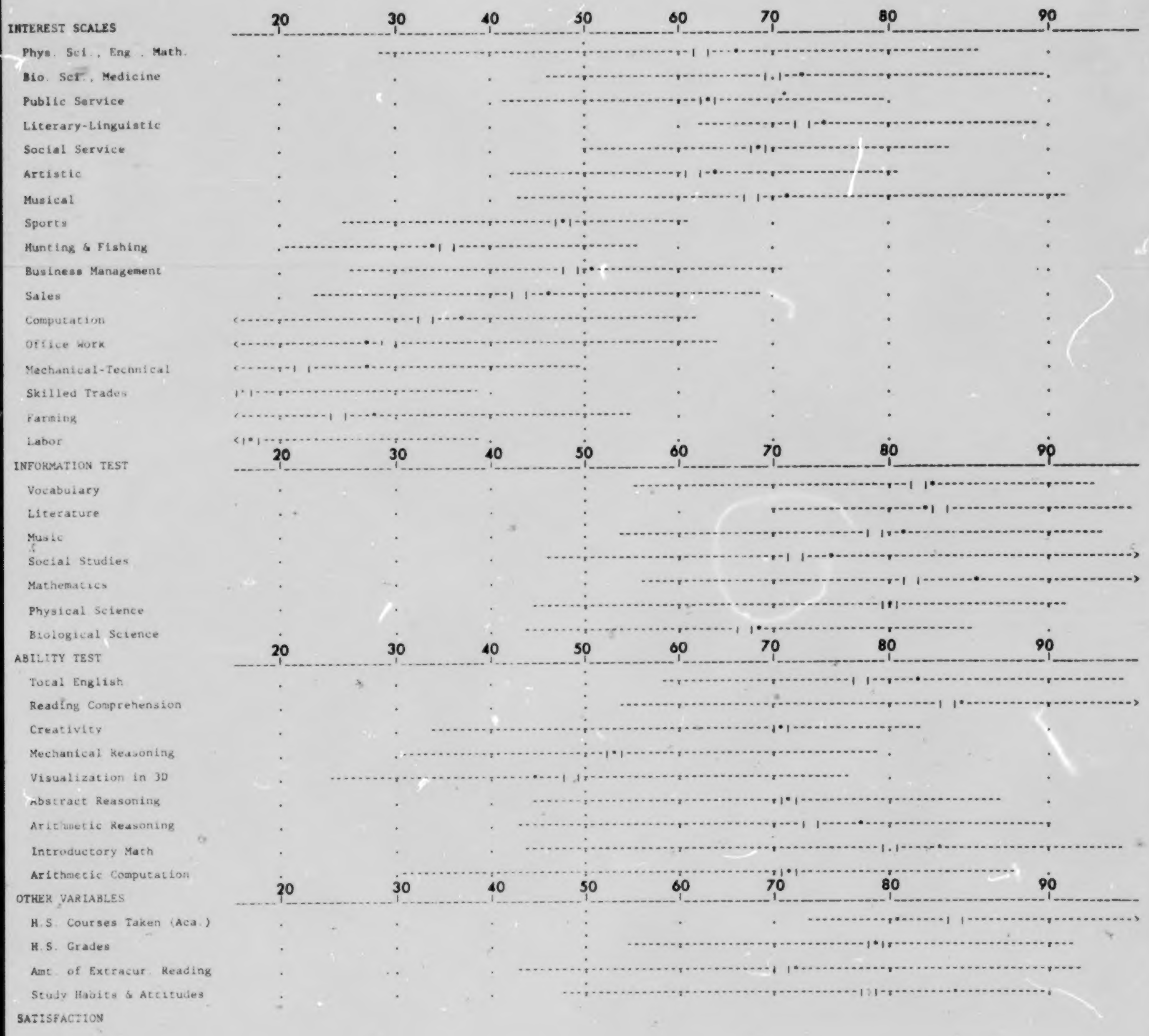
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Importance of Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 84% of individuals in occupation)

PSYCHOLOGIST

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
How Well I Can Do the Work
Interesting Work

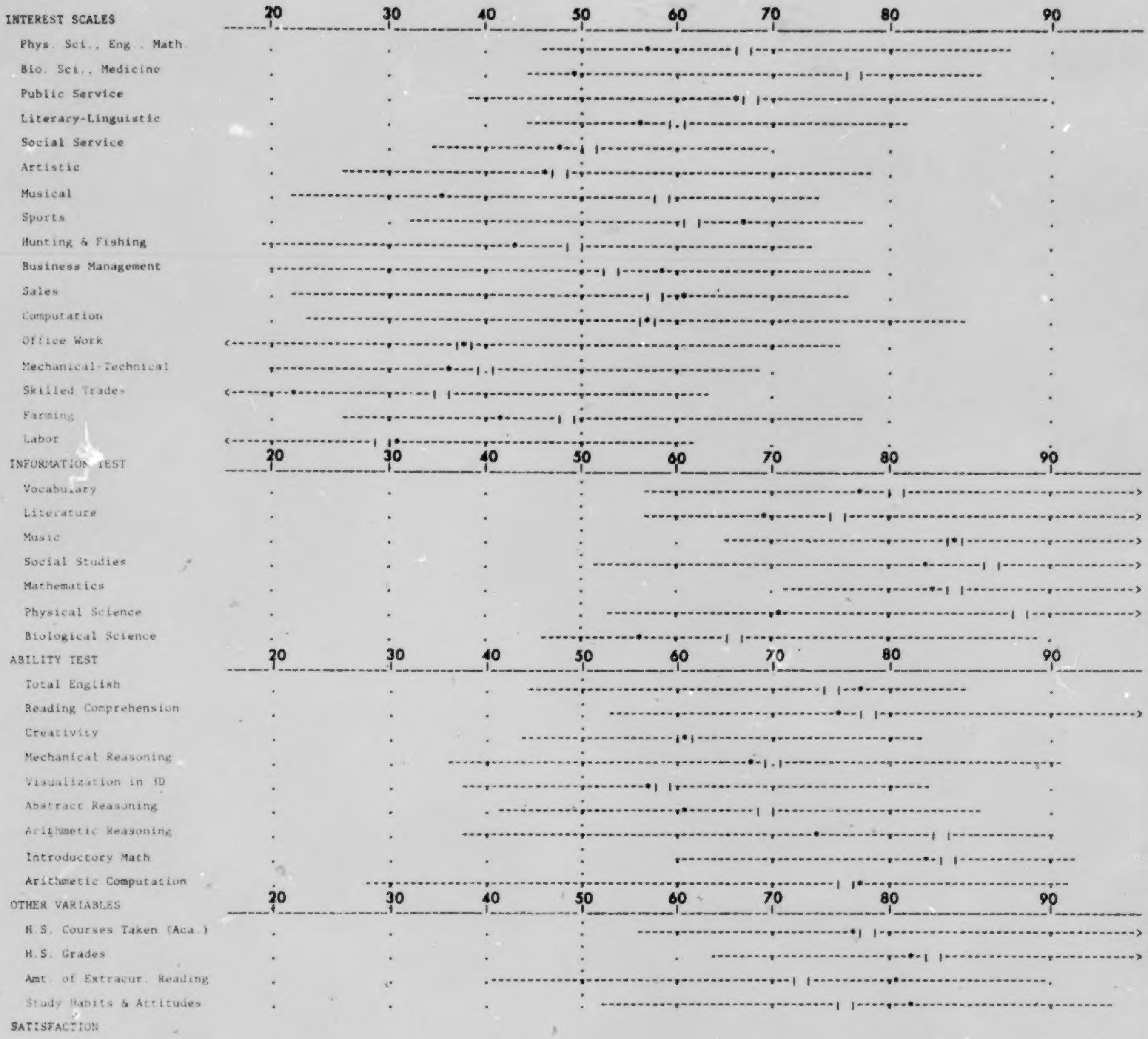
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Status

(* based on 79% of individuals in occupation)

SOCIAL SCIENTIST (INCLUDING ECONOMIST)

(Social Scientist (80%), Economist (20%))

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Friendliness of Co-workers

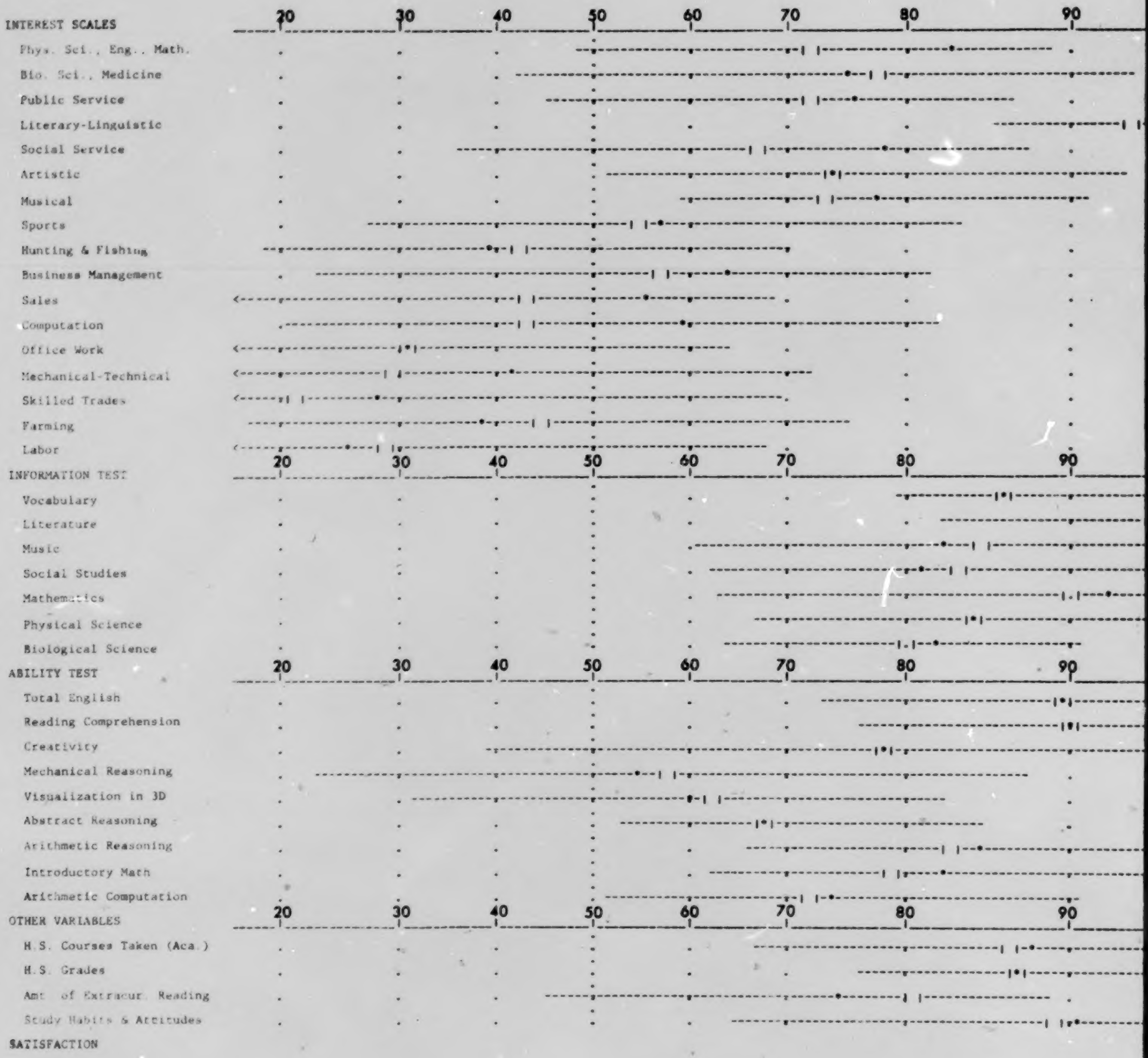
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Status
Opportunity to Advance

(* based on 72% of individuals in occupation)

TEACHER: COLLEGE ENGLISH/FOREIGN LANGUAGE

(Teacher: College English (70%), Teacher: College Foreign Language (30%))

(n = 1 per 1000)



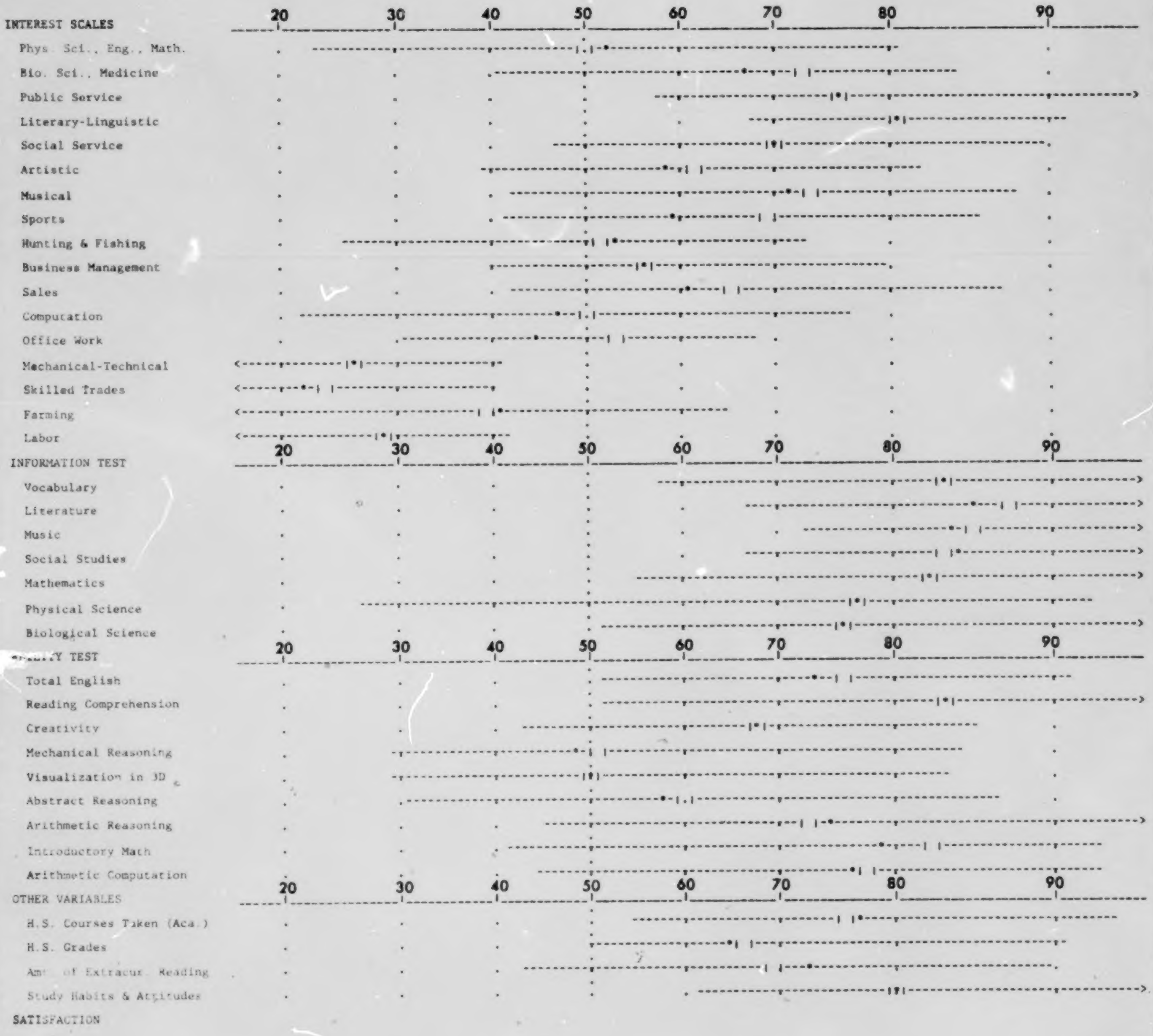
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Job Security
Income Expected
Income to Start

(* based on 71% of individuals in occupation)

TEACHER: COLLEGE SOCIAL SCIENCE

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Length of Vacations
Relationship of Work to Prior Training

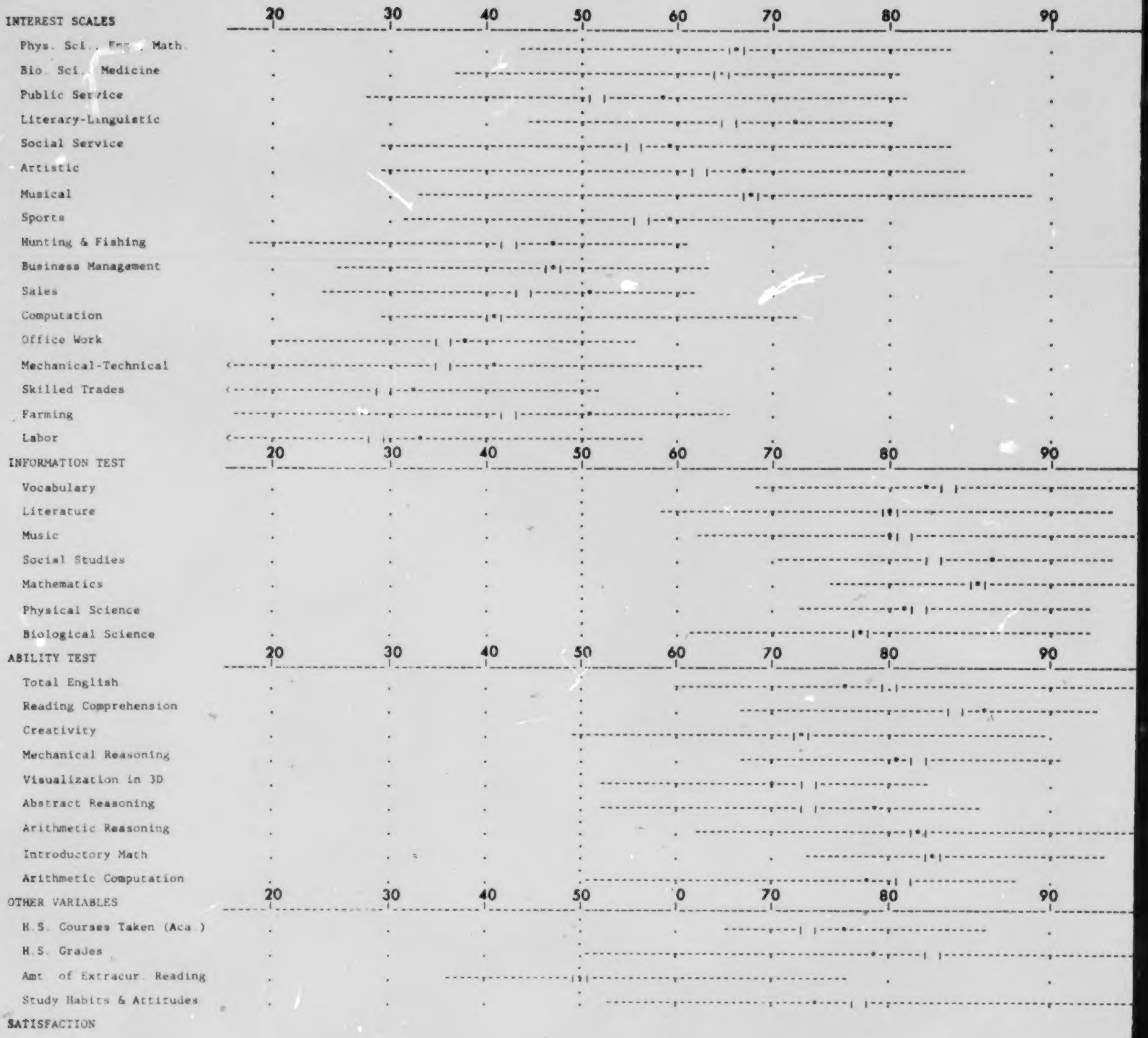
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income Expected
Income to Start
Opportunity to Advance

(* based on 80% of individuals in occupation)

TEACHER: COLLEGE (OTHER SUBJECTS)

(n = 4 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Challenging Work
Relationship of Work to Prior Training

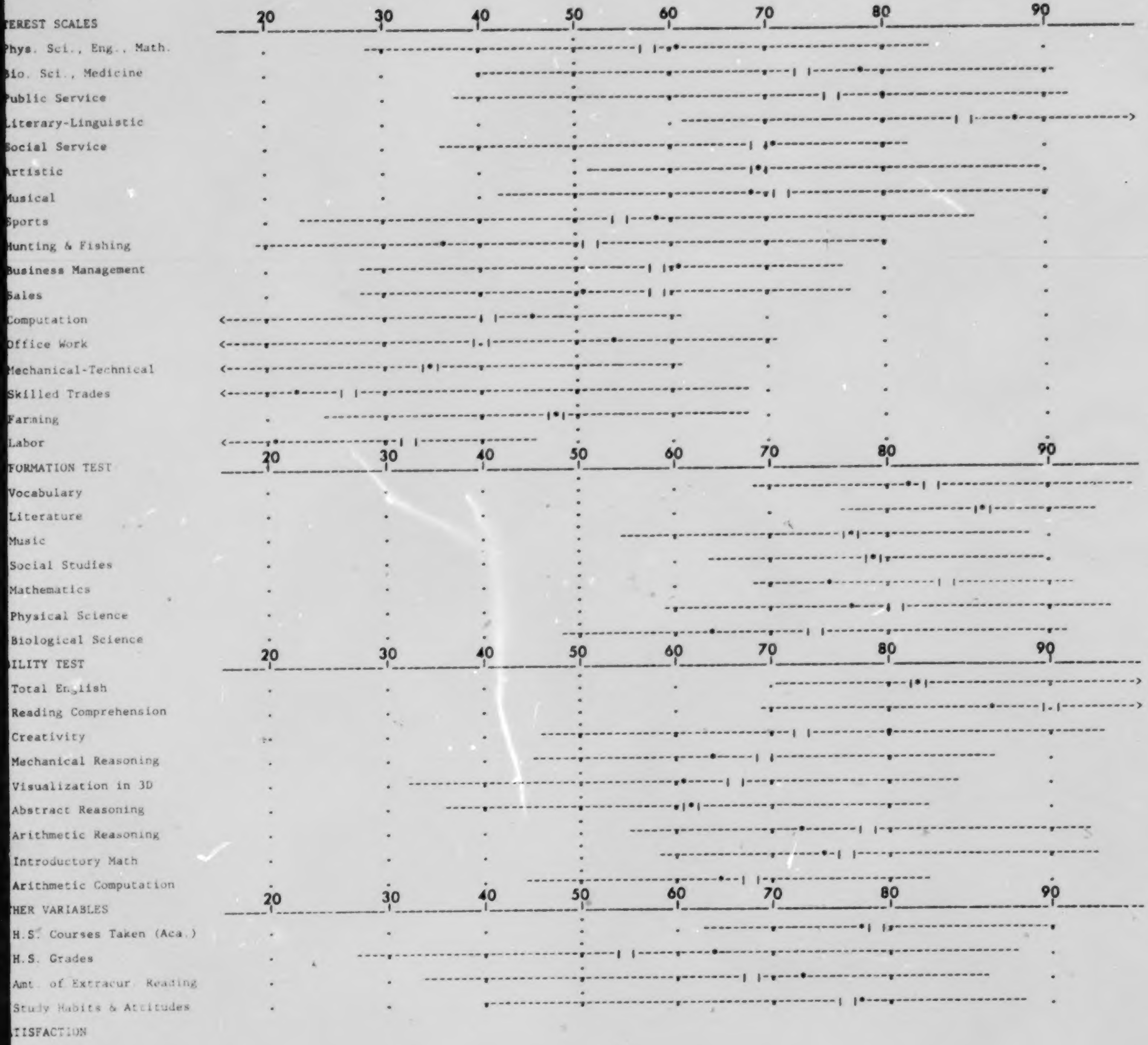
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income Expected
Income to Start
Opportunity to Advance

(* based on 71% of individuals in occupation)

WRITER: NON-FICTION (NOT INCLUDING JOURNALIST) AND FICTION

(Non-Fiction Writer (62%), Fiction Writer (1%),
Writer (Not Elsewhere Classified) (37%))

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Power
Job Security
Income to Start

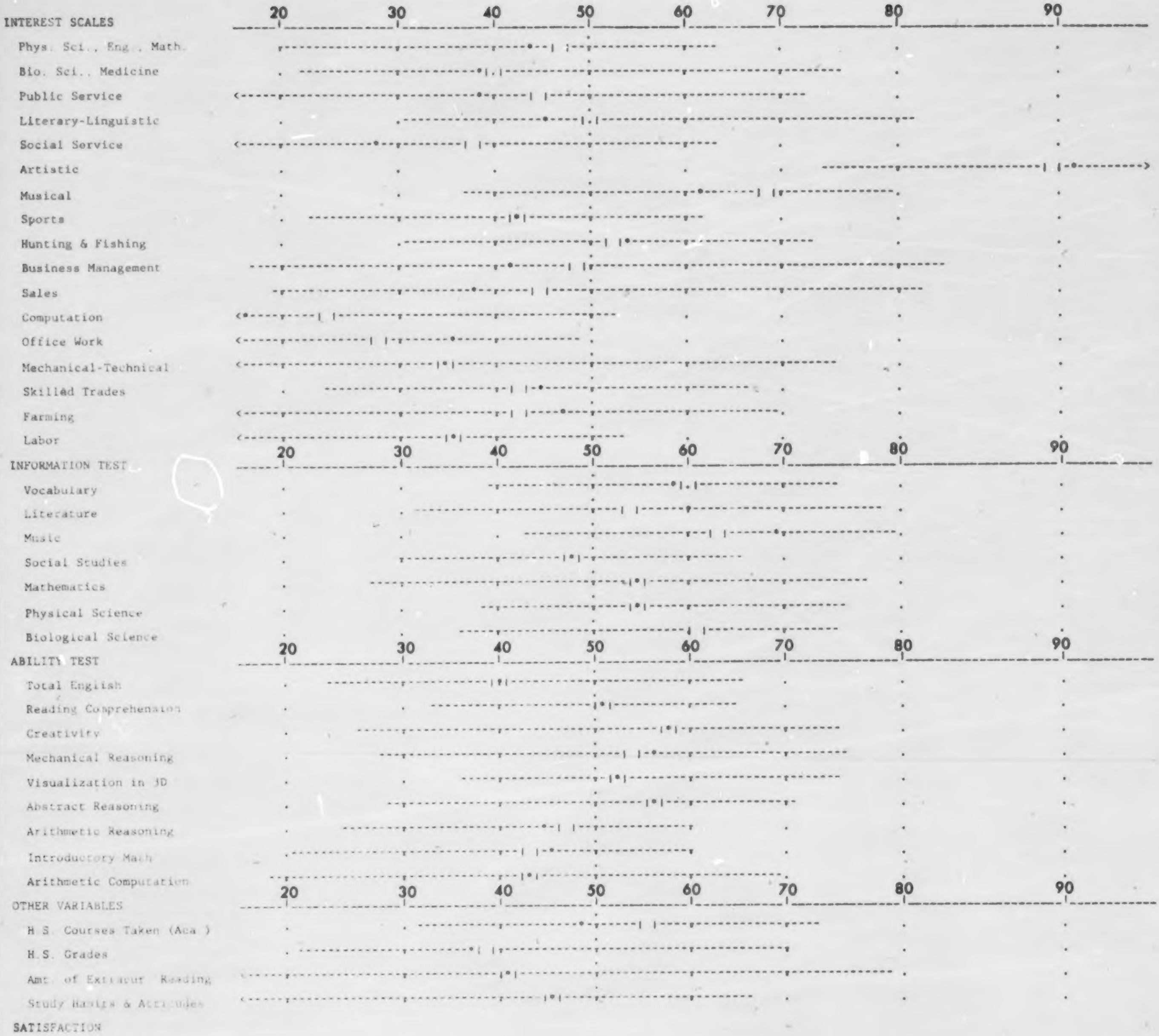
(* based on 46% of individuals in occupation)

CAREER GROUP 6

FINE ARTS, PERFORMING ARTS

COMMERCIAL ARTIST

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Friendliness of Co-workers

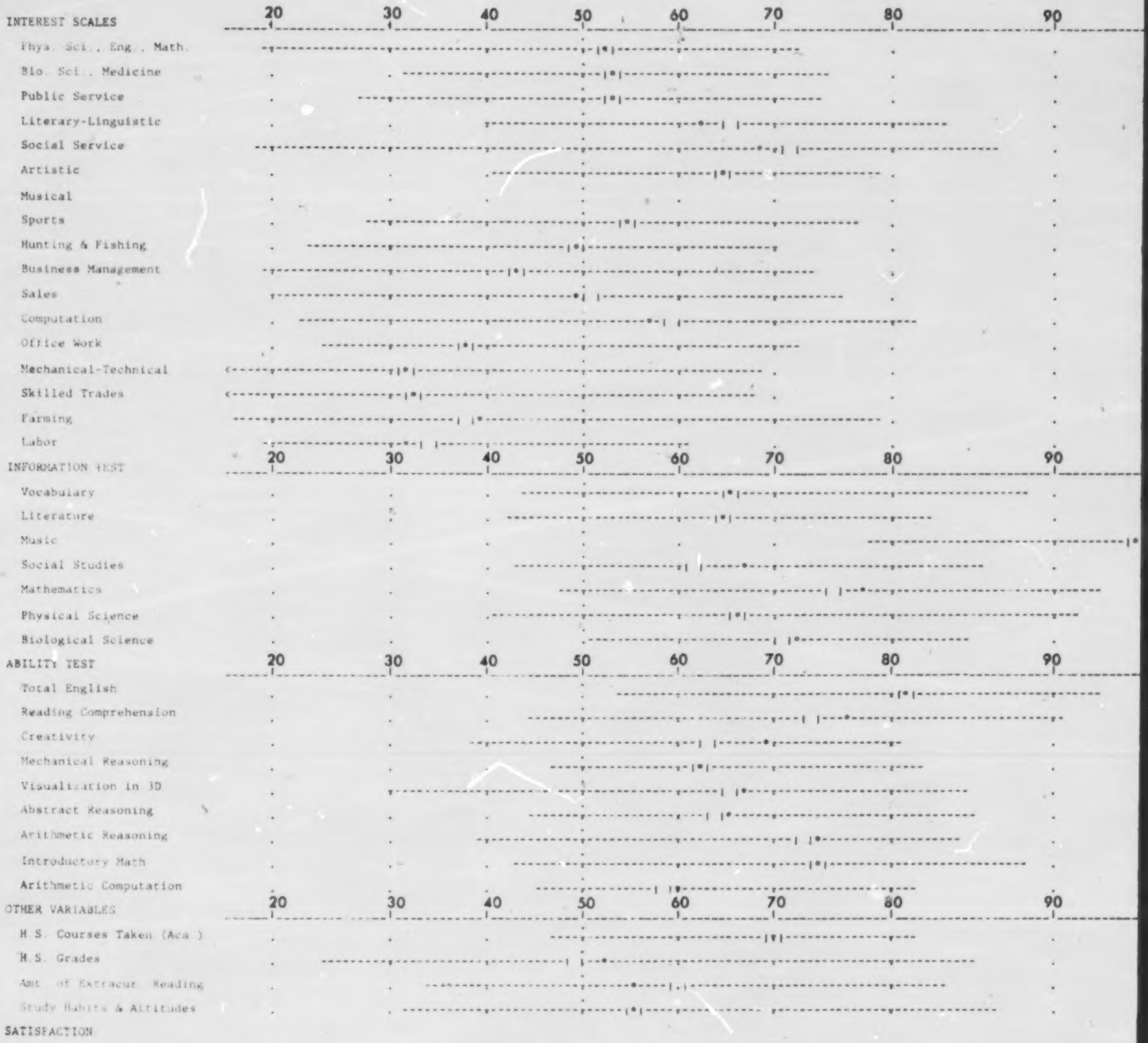
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Length of Vacations
Job Security

(* based on 78% of individuals in occupation)

MUSICAL ARTIST

(Instrumental Musician (69%), Music-Related Artist (26%), Singer (5%))

(n < 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Importance of Work

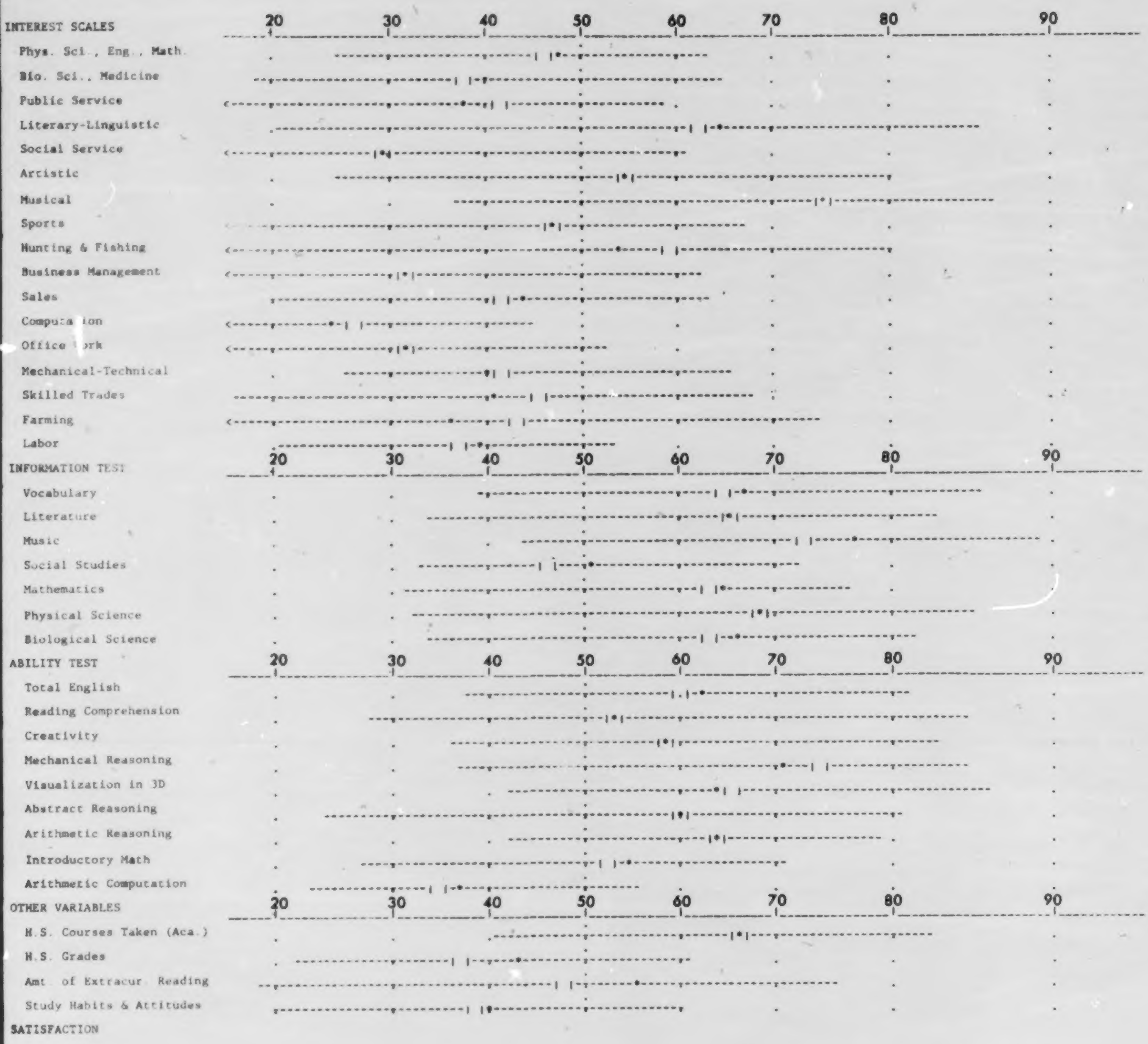
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 98% of individuals in occupation)

PERFORMING ARTIST

(Miscellaneous Performing Artists (69%), Dancer (17%), Actor/Actress (14%))

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Job Security

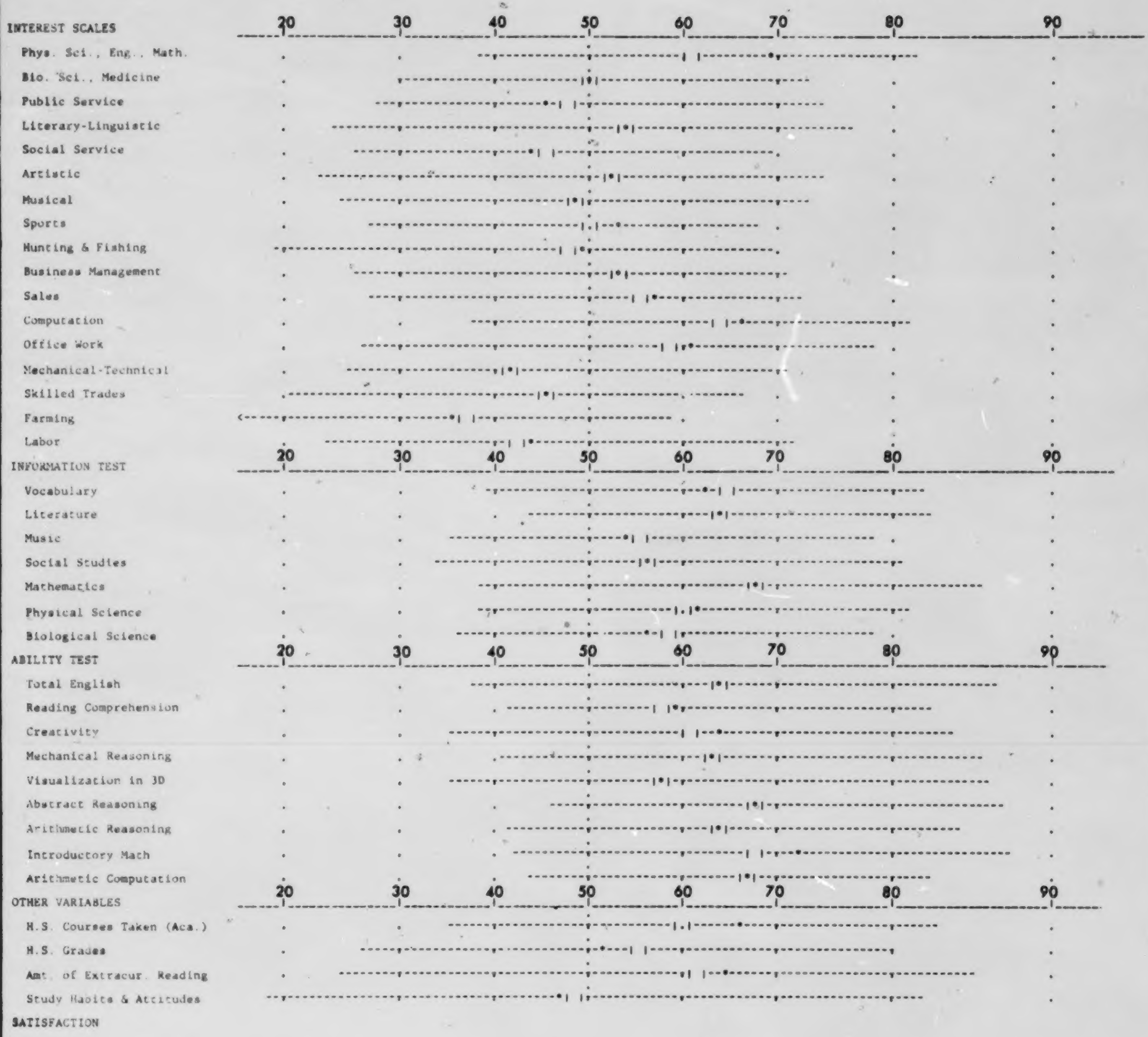
(* based on 83% of individuals in occupation)

CAREER GROUP 7

TECHNICAL JOBS

COMPUTER OPERATOR/SUPERVISOR

(n = 7 per 1000)



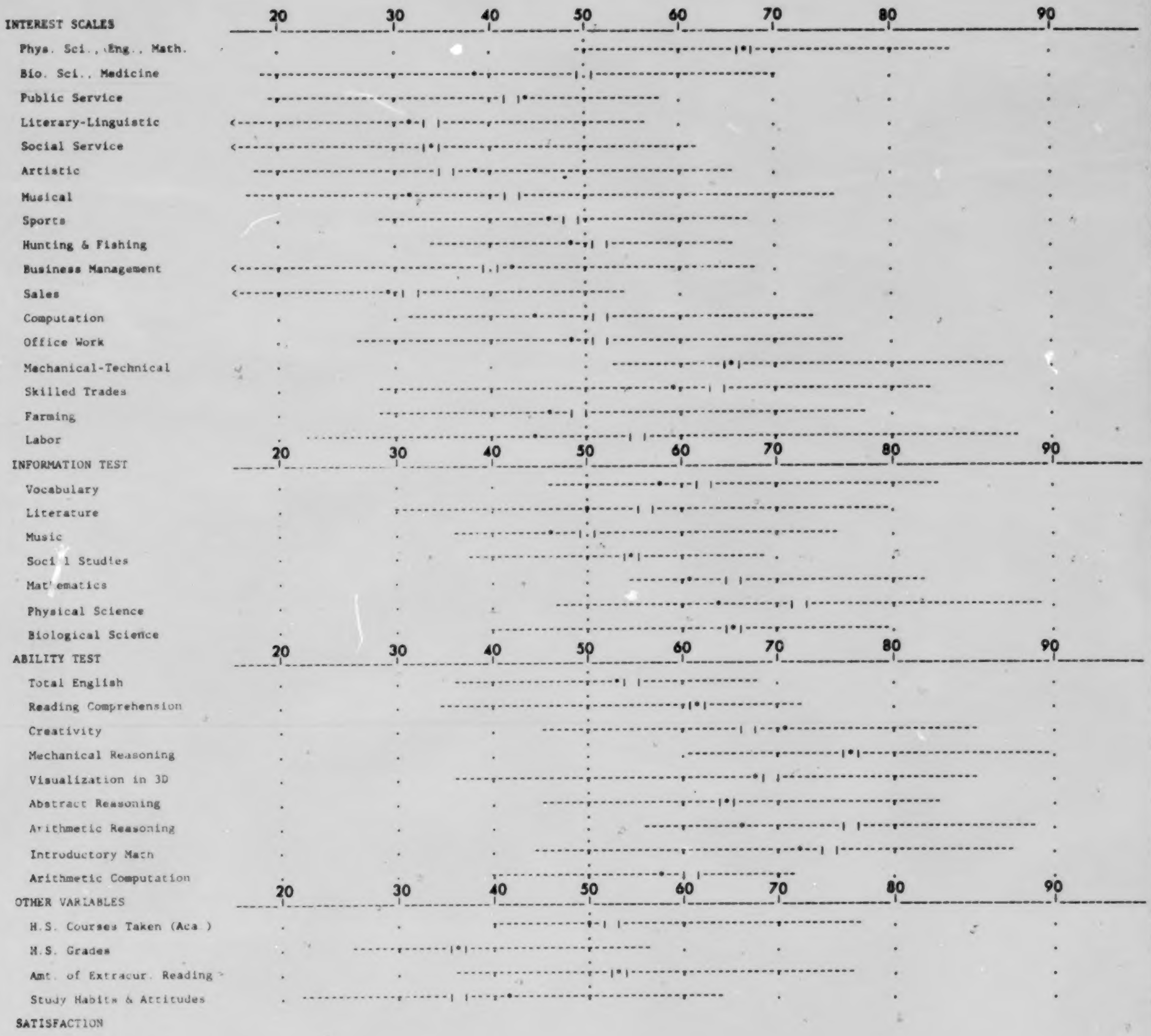
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Status
Income to Start
Opportunity to Advance

(* based on 78% of individuals in occupation)

COMPUTER SERVICES REPAIR WORKER

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Job Security
Interesting Work
Challenging Work

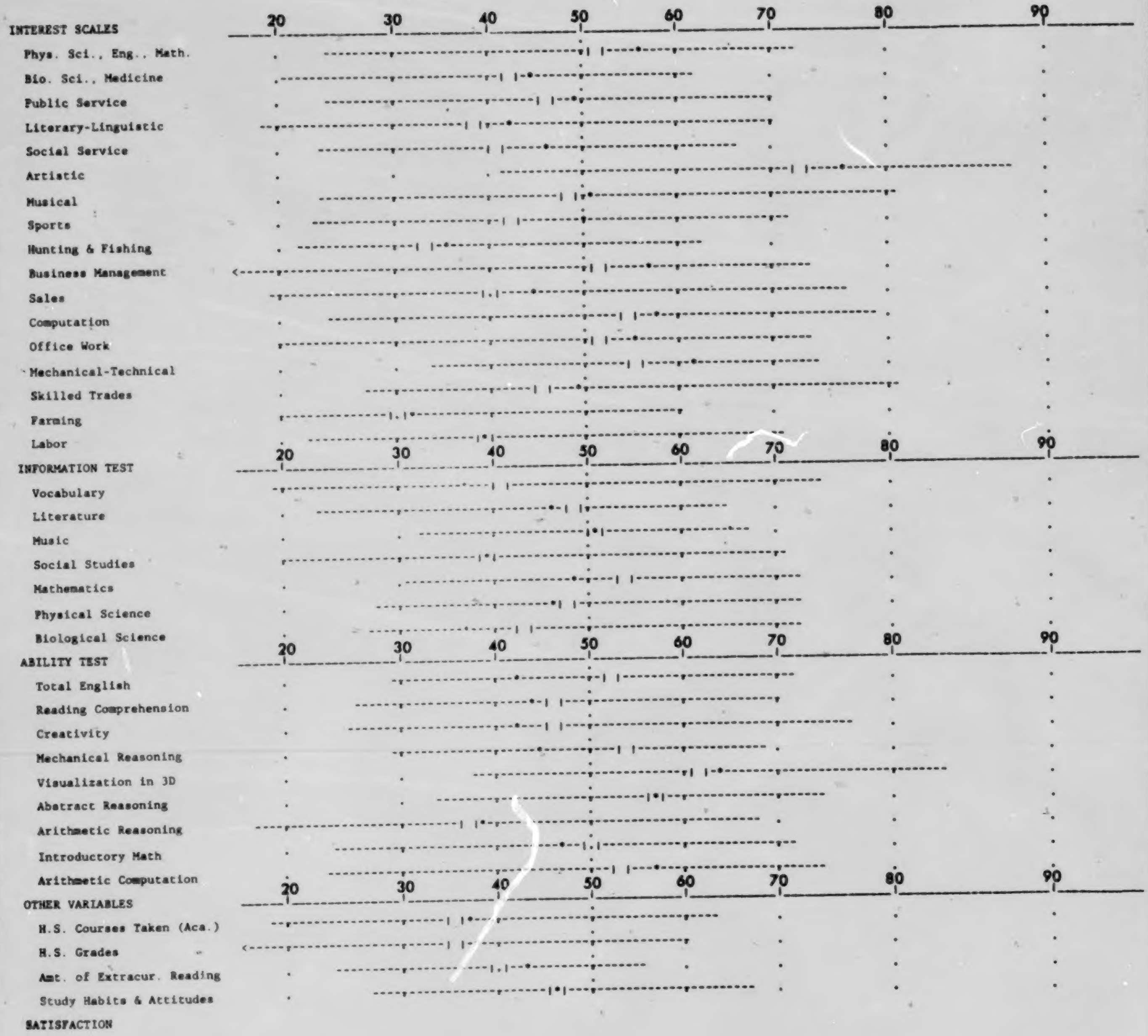
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Length of Vacations
Status
Income to Start

(* based on 54% of individuals in occupation)

DRAFTING/BLUEPRINT DESIGNER

(n = 4 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Relationship of Work to Prior Training

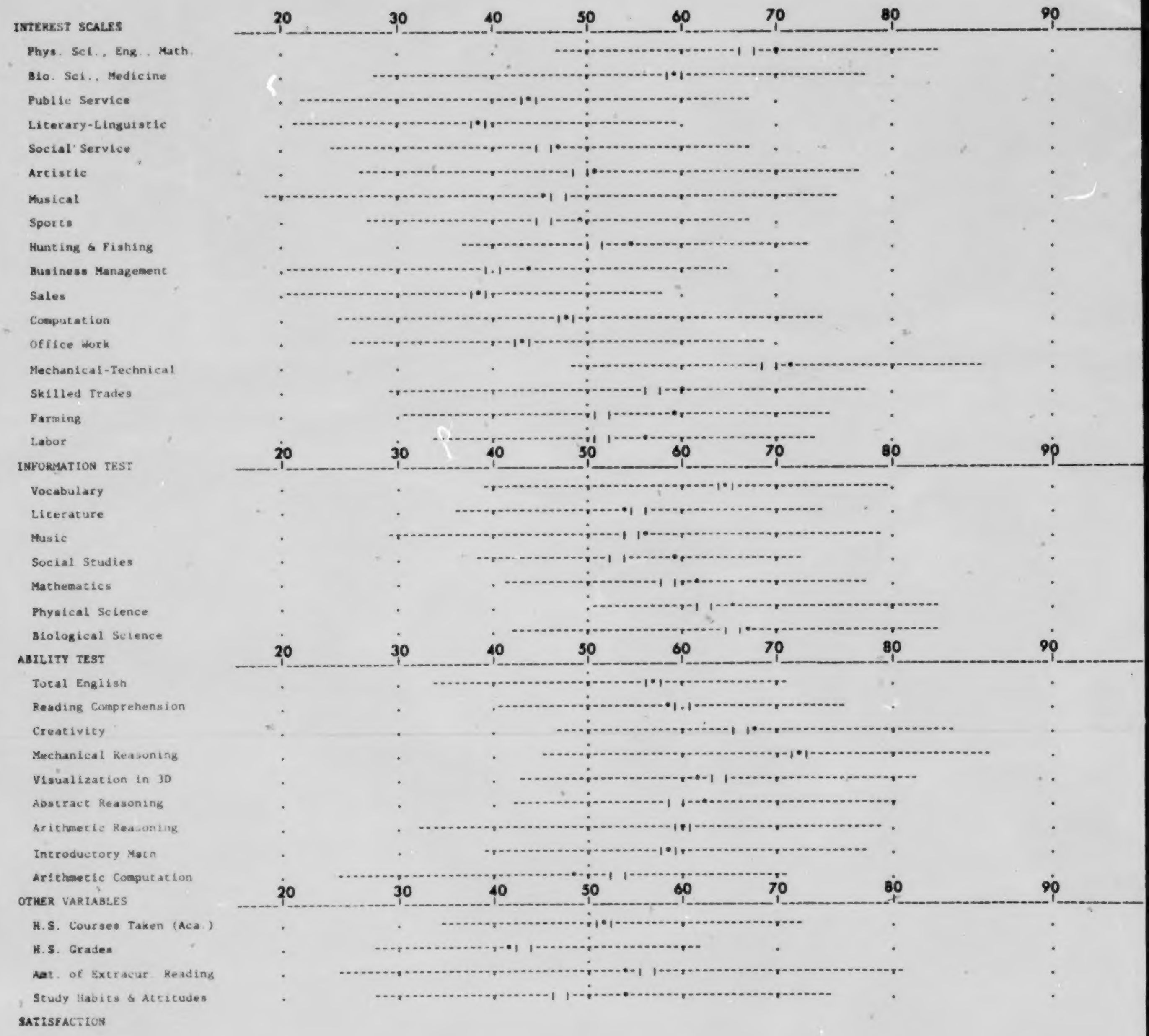
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Income to Start
Opportunity to Advance

(* based on 64% of individuals in occupation)

ELECTRONICS TECHNICIAN

(n = 6 per 1000)



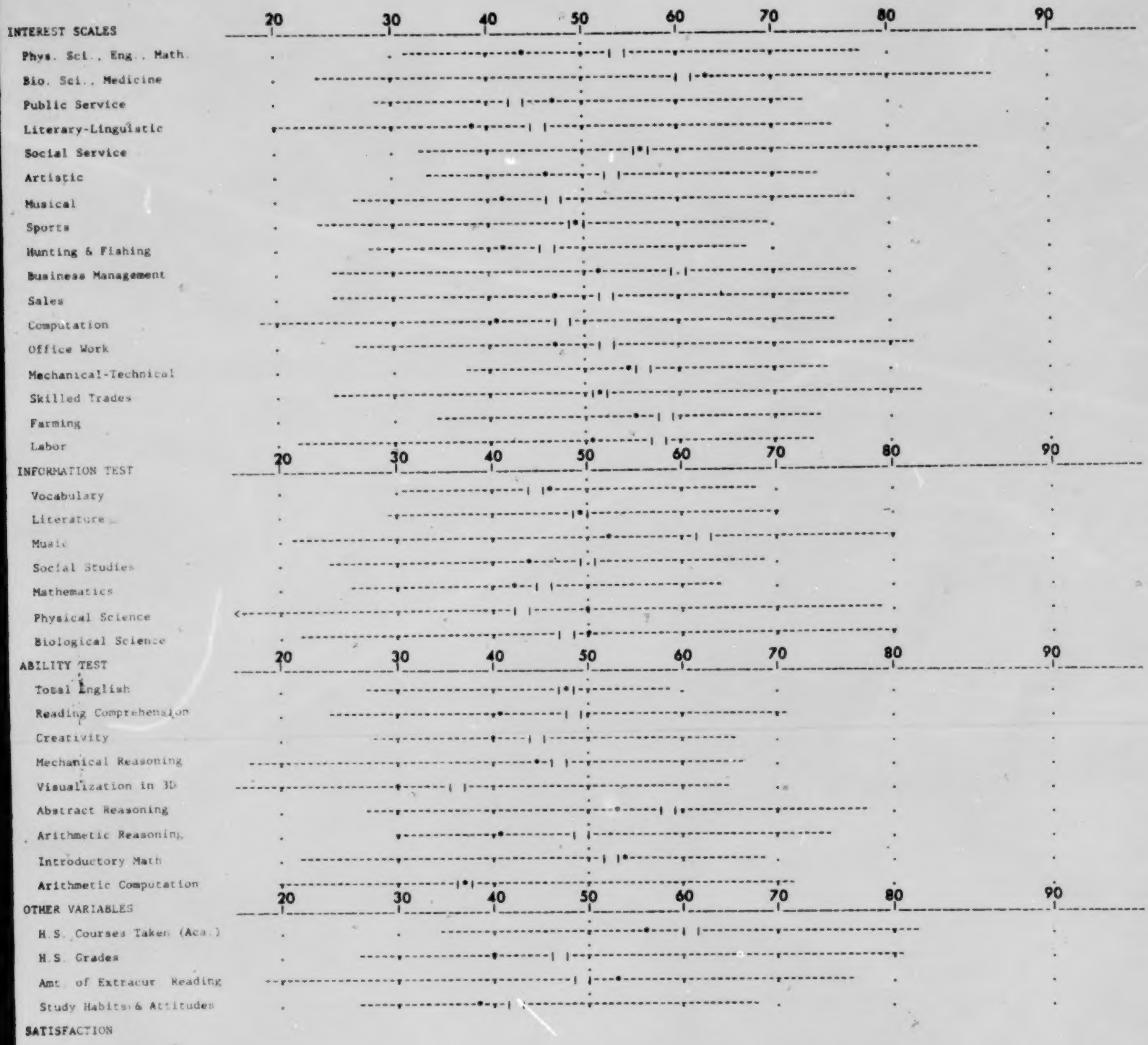
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Quality of Surroundings

(* based on 68% of individuals in occupation)

MEDICAL/DENTAL TECHNICIAN

(n = 6 per 1000)



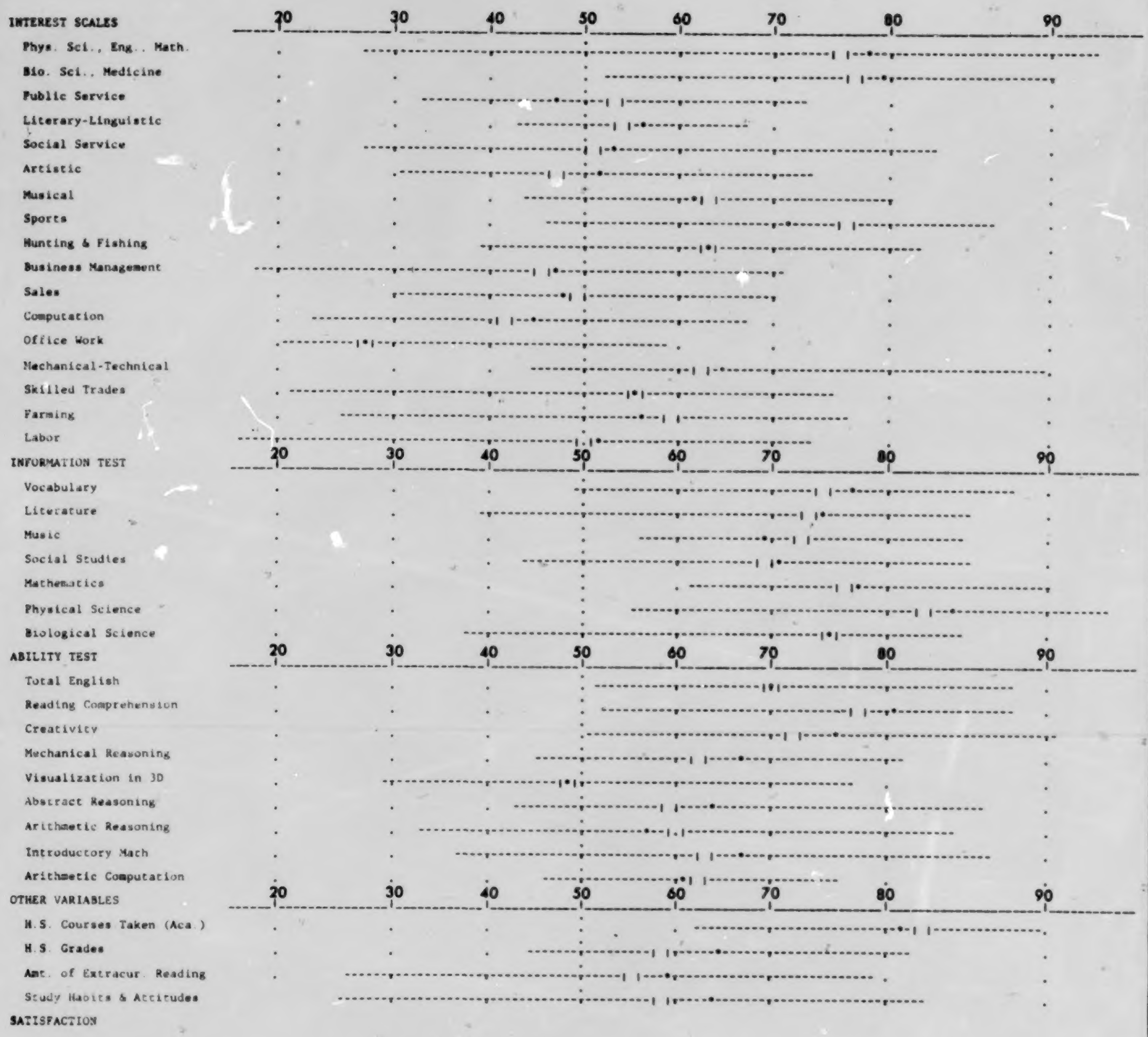
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Importance of Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 64% of individuals in occupation)

MEDICAL/DENTAL TECHNOLOGIST

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
Importance of Work
How Well I Can Do the Work

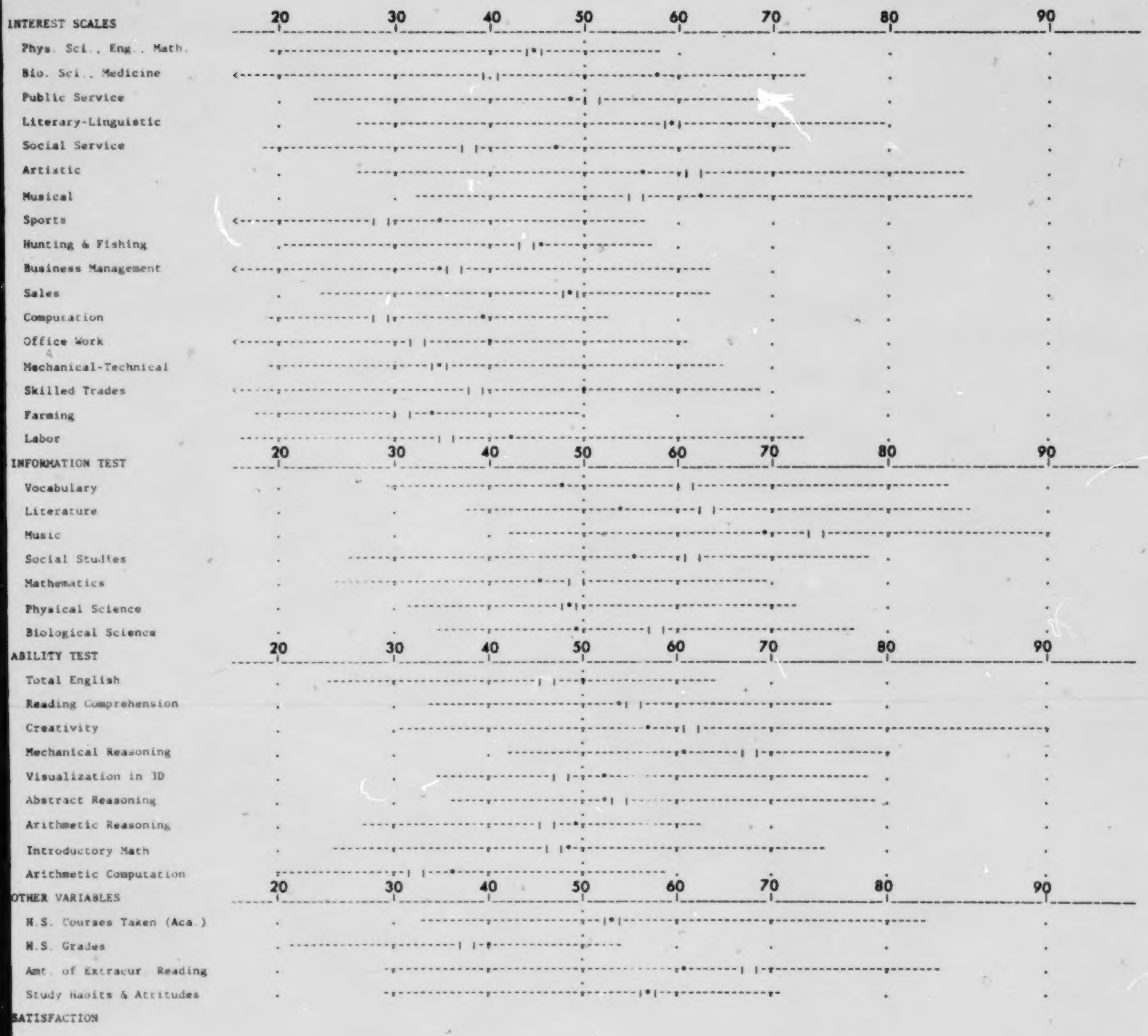
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Length of Vacations
Status

(* based on 82% of individuals in occupation)

PHOTOGRAPHER

(n = 1 per 1000)



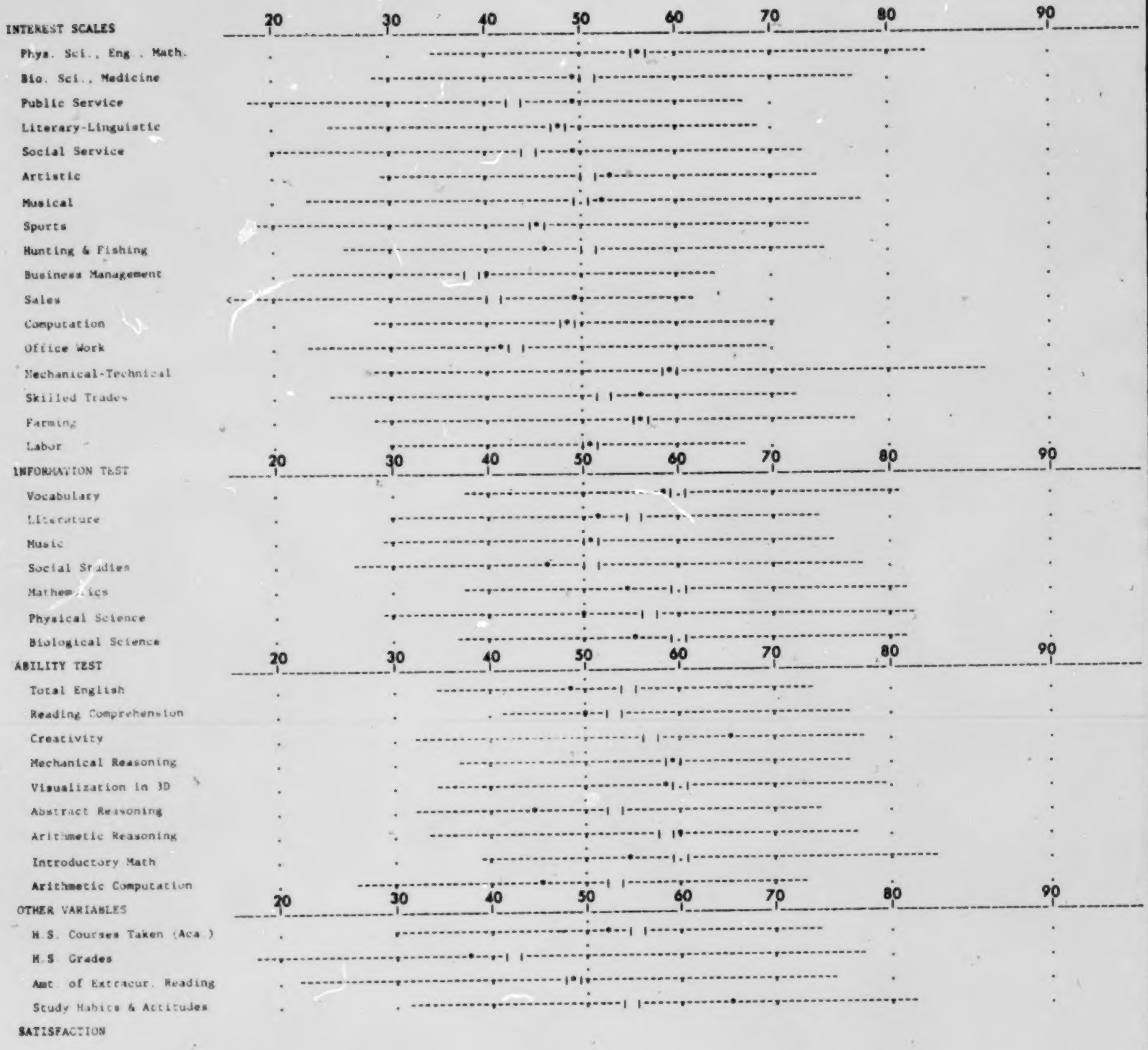
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Status

(* based on 60% of individuals in occupation)

RESEARCH ASSISTANT

(n = 6 per 1000)



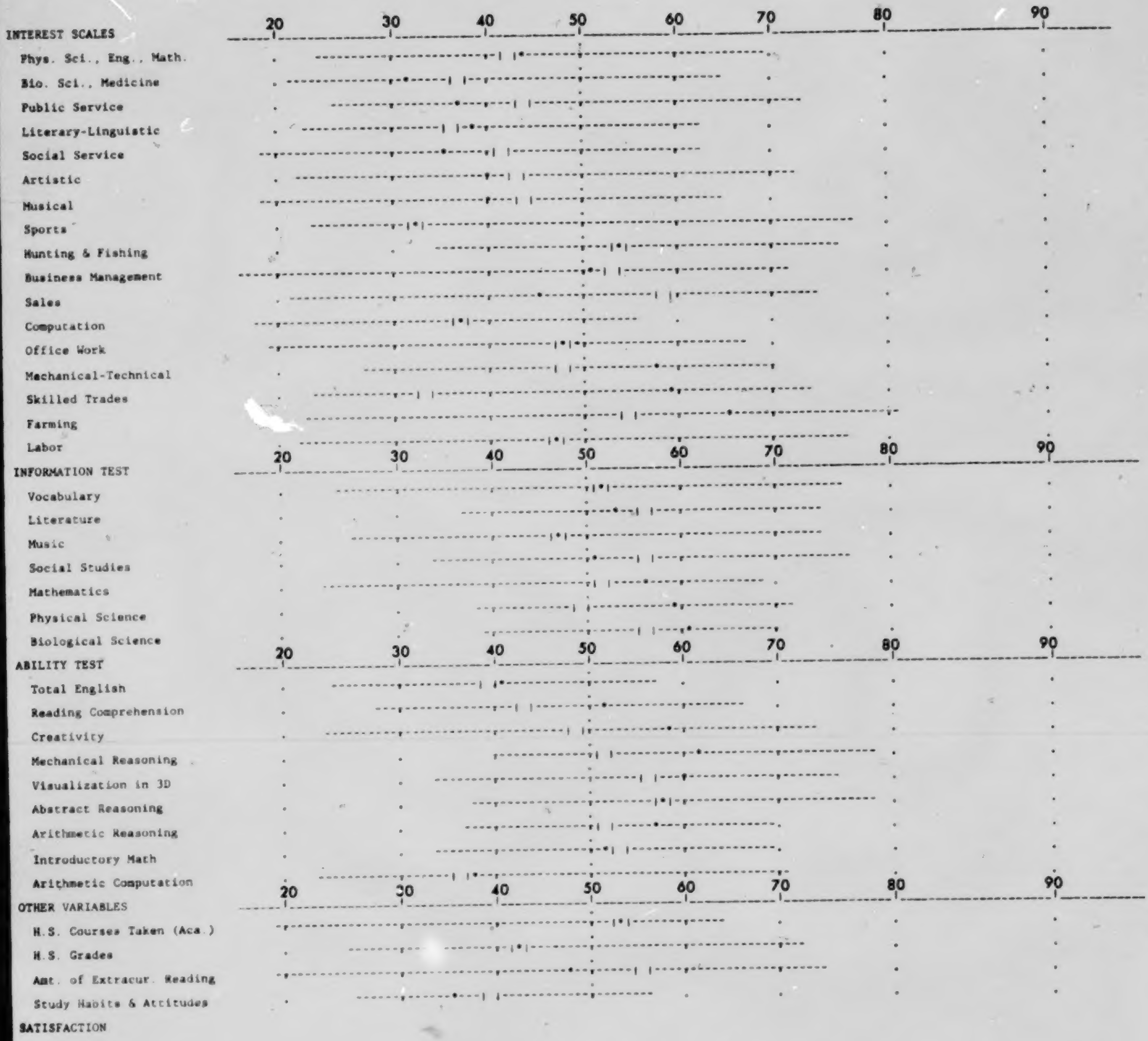
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Quality of Surroundings

(* based on 58% of individuals in occupation)

SURVEYOR

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Status
Opportunity to Advance

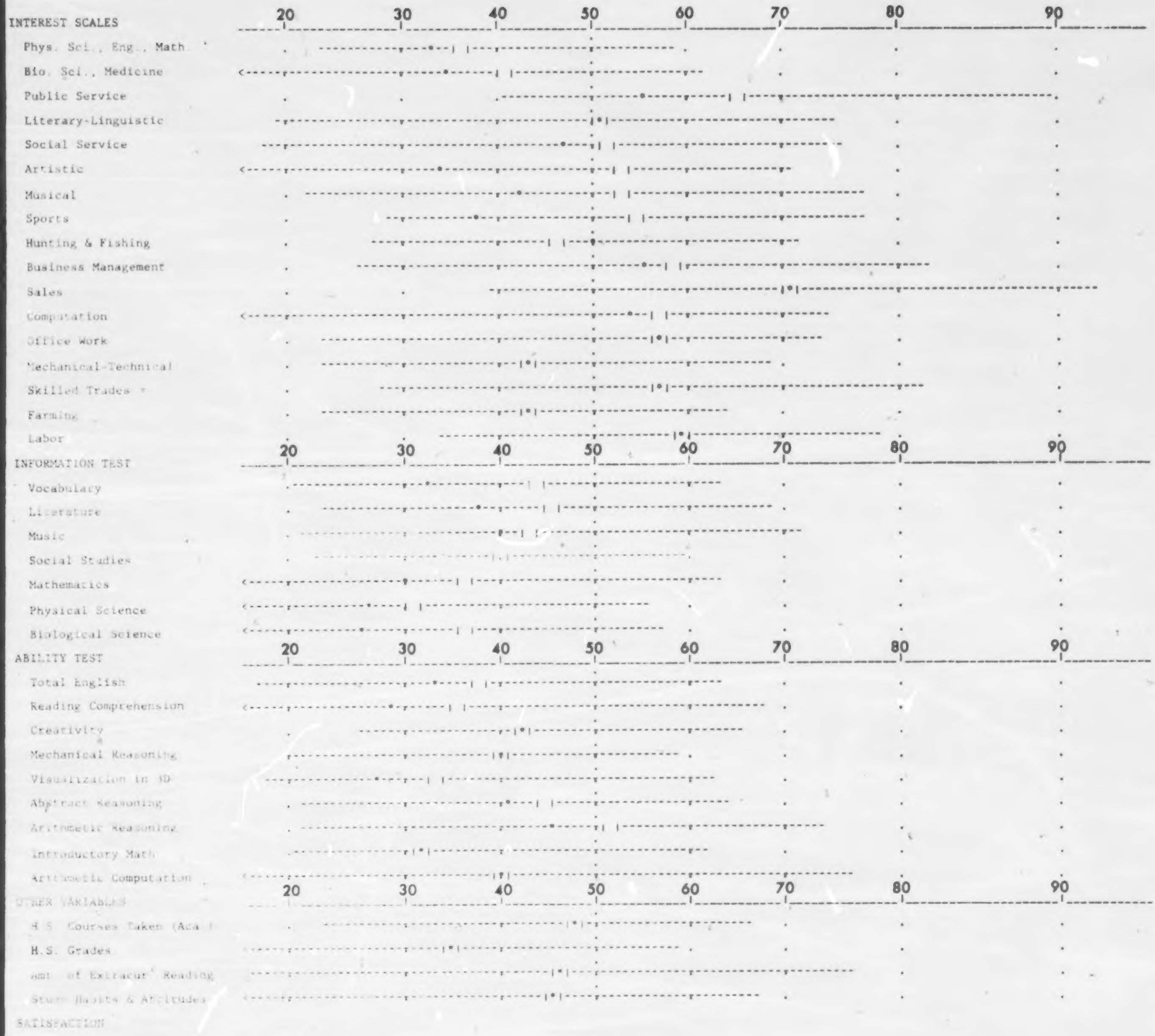
(* based on 65% of individuals in occupation)

CAREER GROUP 8

PROPRIETORS, SALES

AUTO SALES REPRESENTATIVE

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Income Expected
Interesting Work
Challenging Work

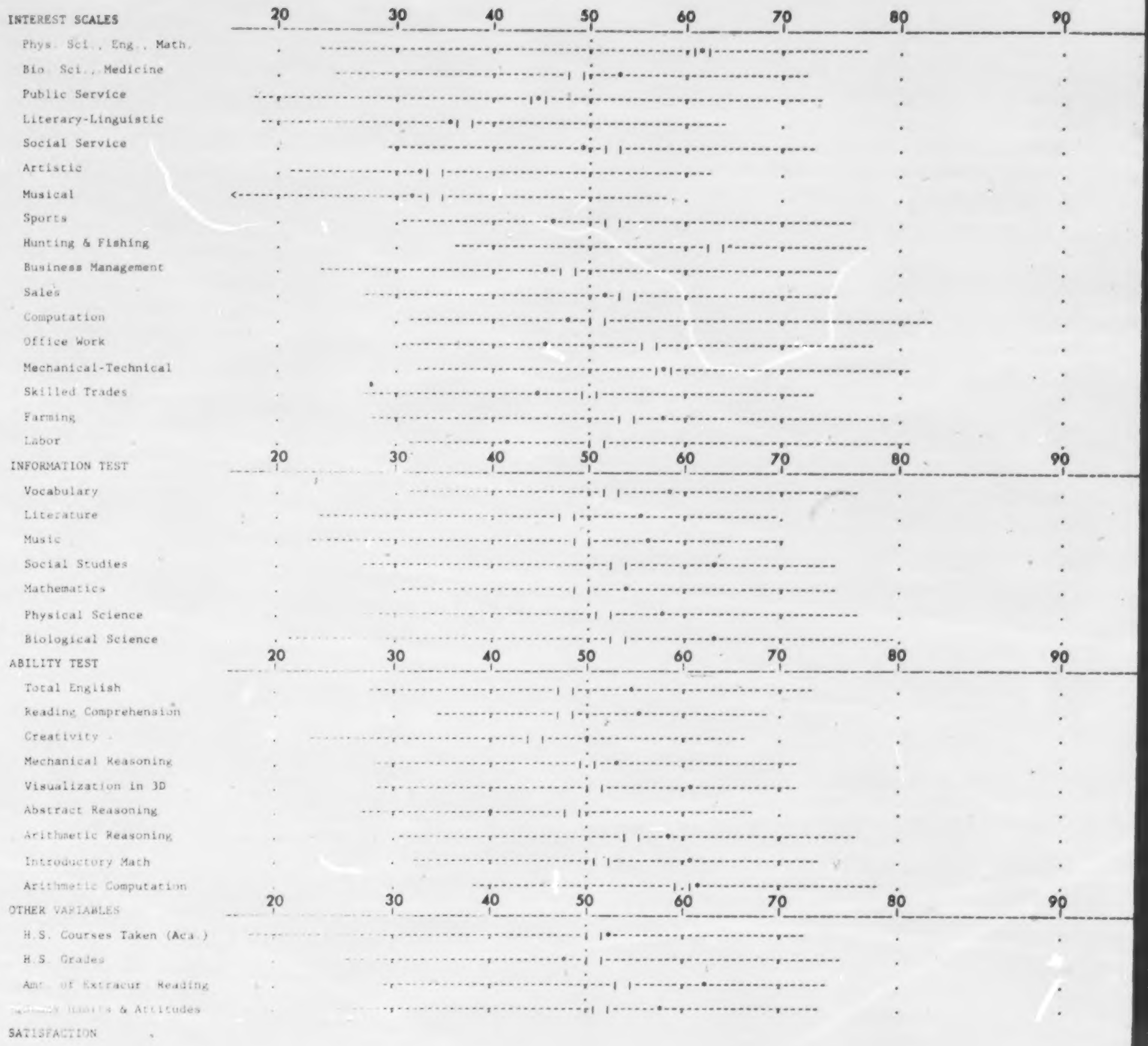
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Length of Work Week
Length of Vacations
Status

(* based on 58% of individuals in occupation)

BUSINESS SUPERVISOR

(n = 7 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

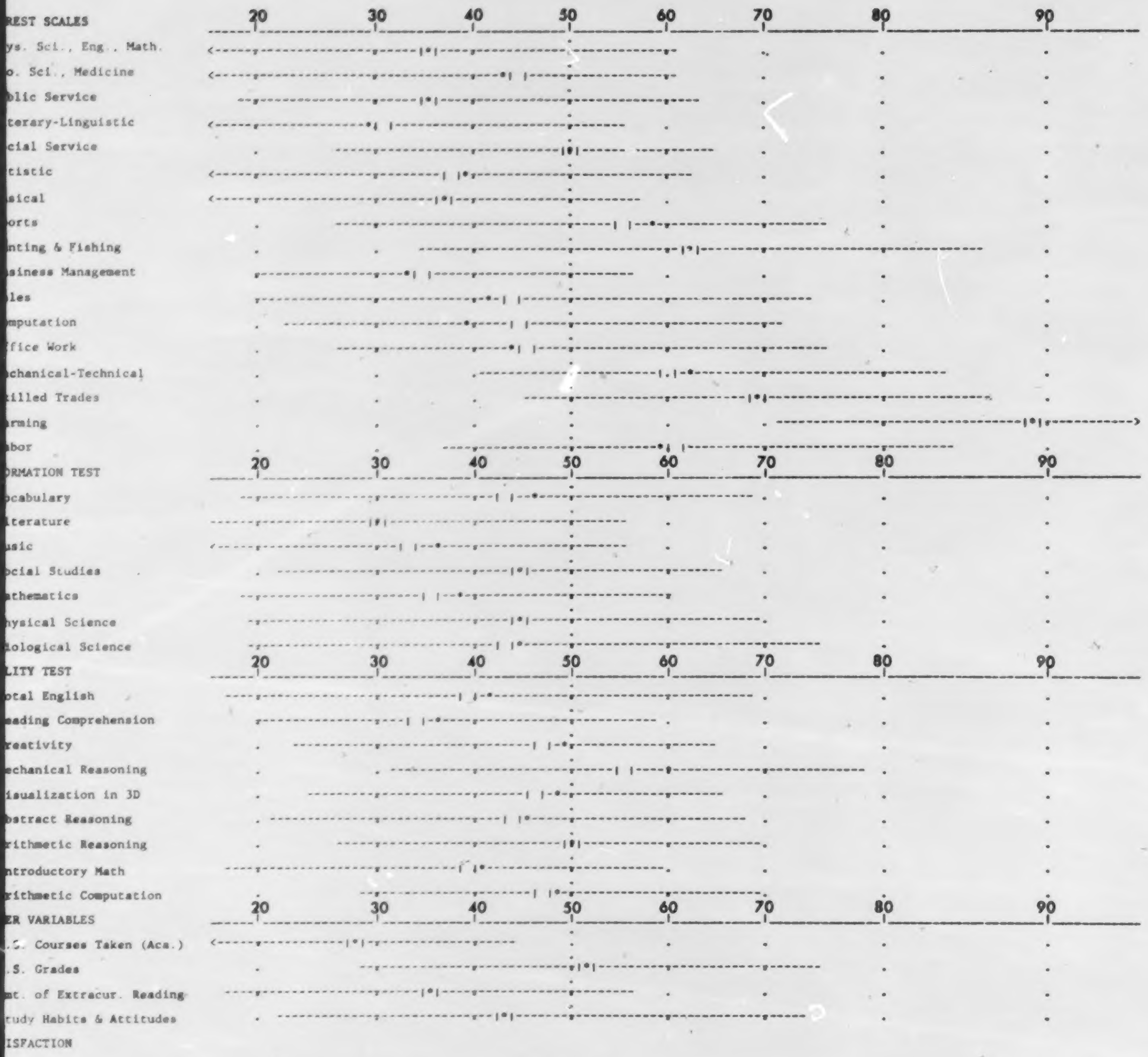
Income to Start
Relationship of Work to Prior Training
Quality of Surroundings

(* based on 60% of individuals in occupation)

FARM/RANCH OWNER OR MANAGER

(Farm/Ranch Owner (96%), Farm/Ranch Manager (4%))

(n = 7 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Importance of Work
How Well I Can Do the Work
Challenging Work

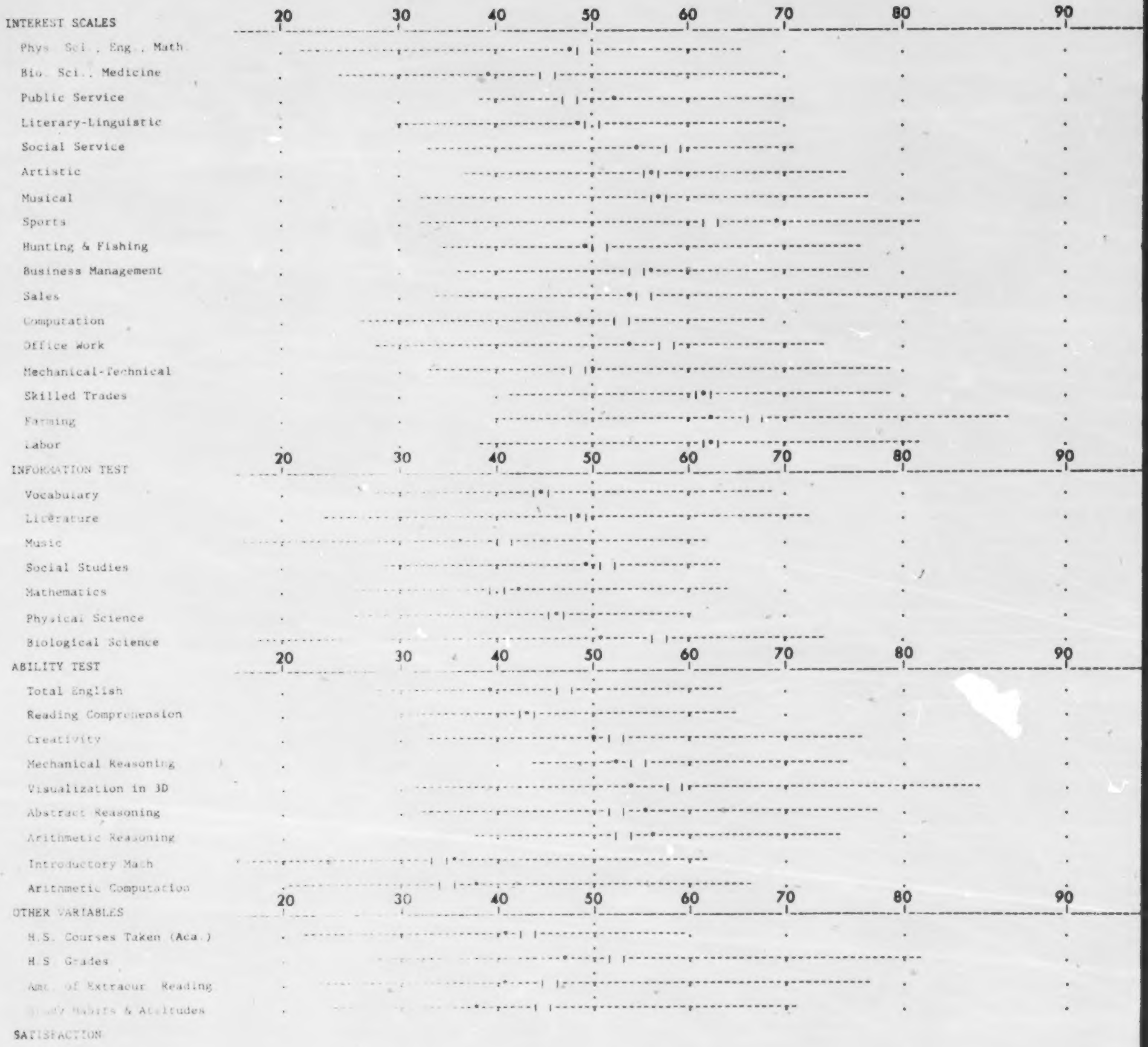
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Status
Income Expected

(* based on 83% of individuals in occupation)

INDEPENDENT CONTRACTOR

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Income Expected
How Well I Can Do the Work
Interesting Work

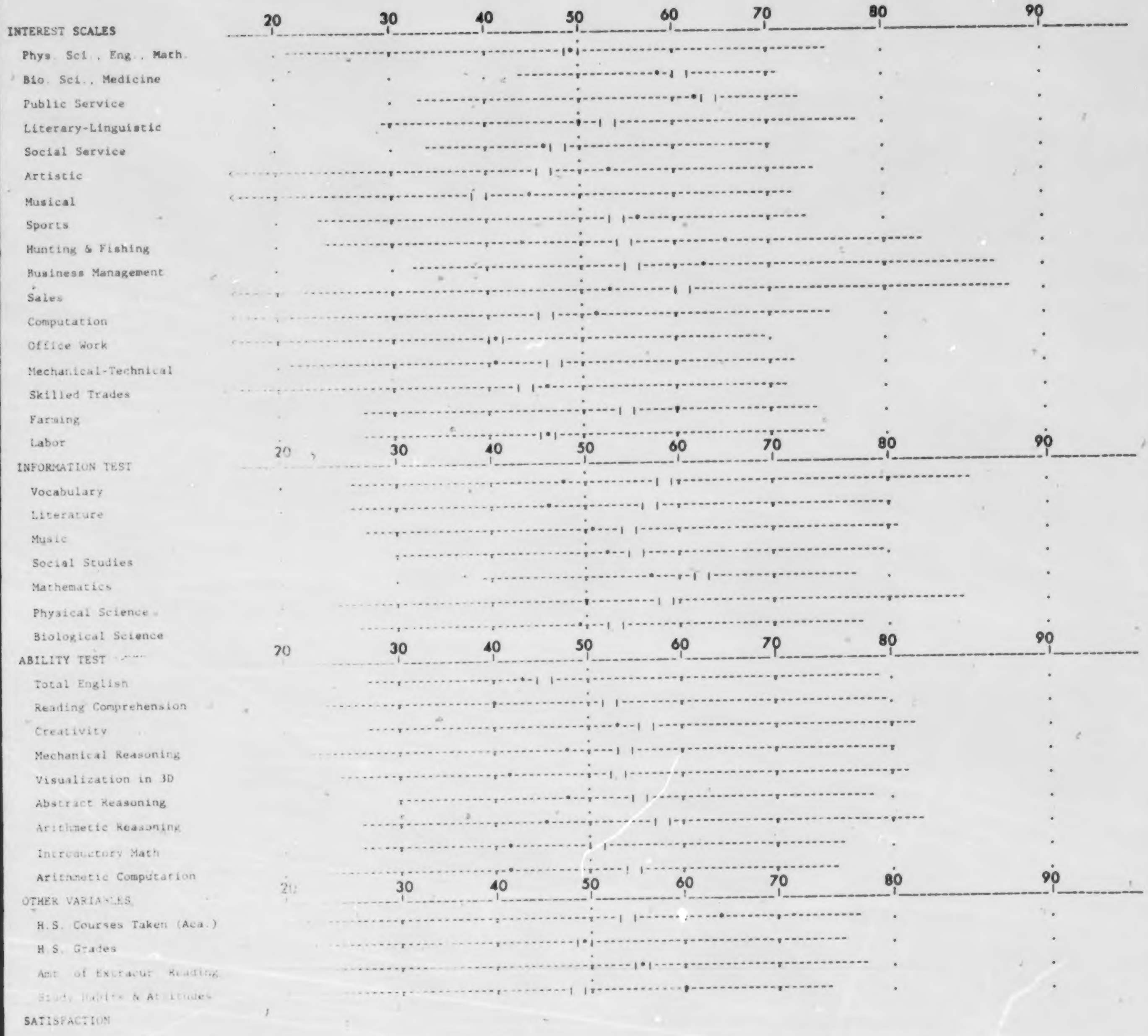
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Quality of Surroundings
Income to Start
Friendliness of Co-workers

(* based on 80% of individuals-in occupation)

INDEPENDENT PROPRIETOR

(n = 7 per 1000)

4



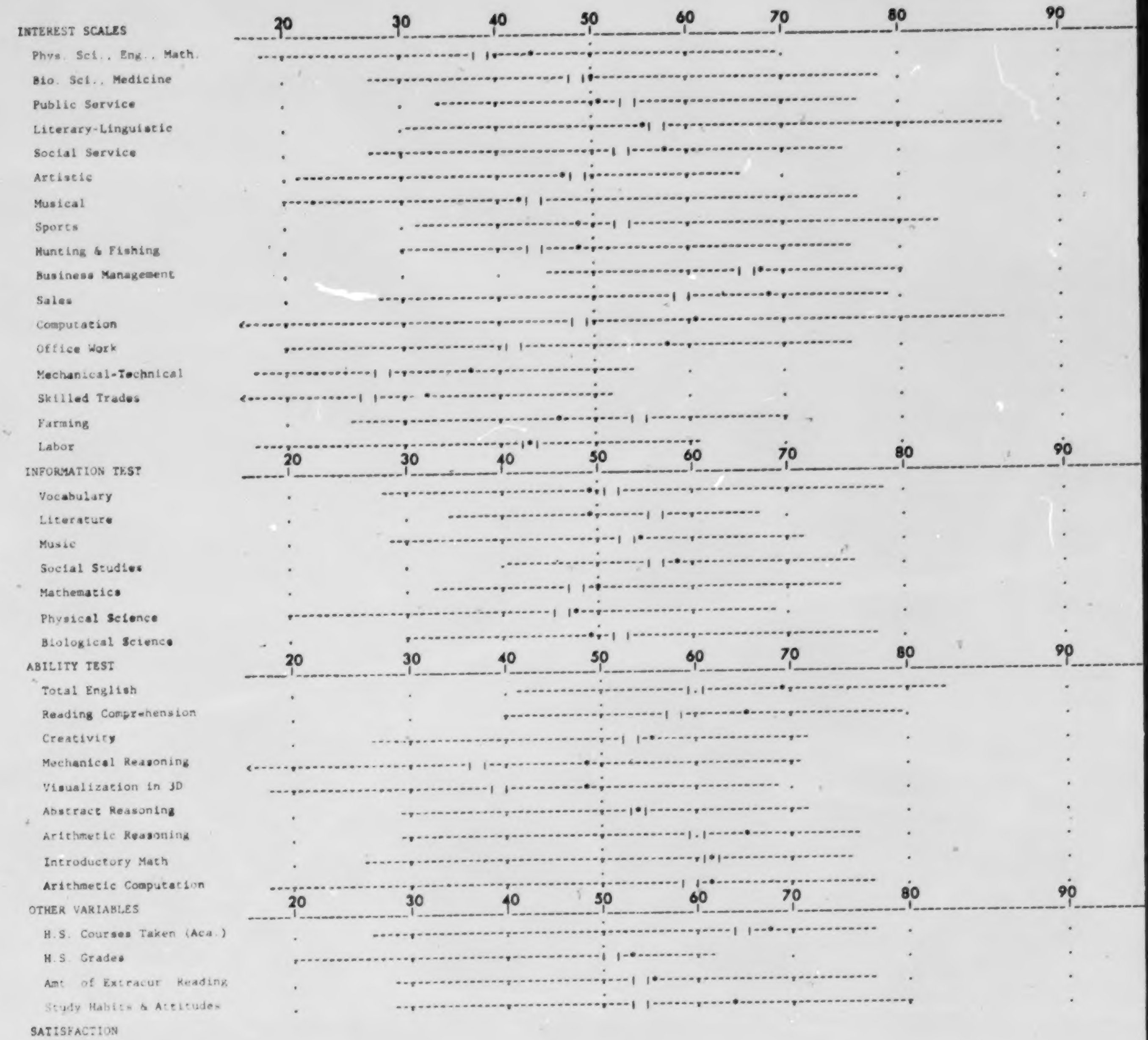
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Challenging Work
Income Expected

Aspects of Occupation that Project TALENT Participants Report as Important* but Least Satisfying
Income to Start
Status
Importance of Work

(* based on 66% of individuals in occupation)

INSURANCE SALES REPRESENTATIVE

(n = 4 per 1000)



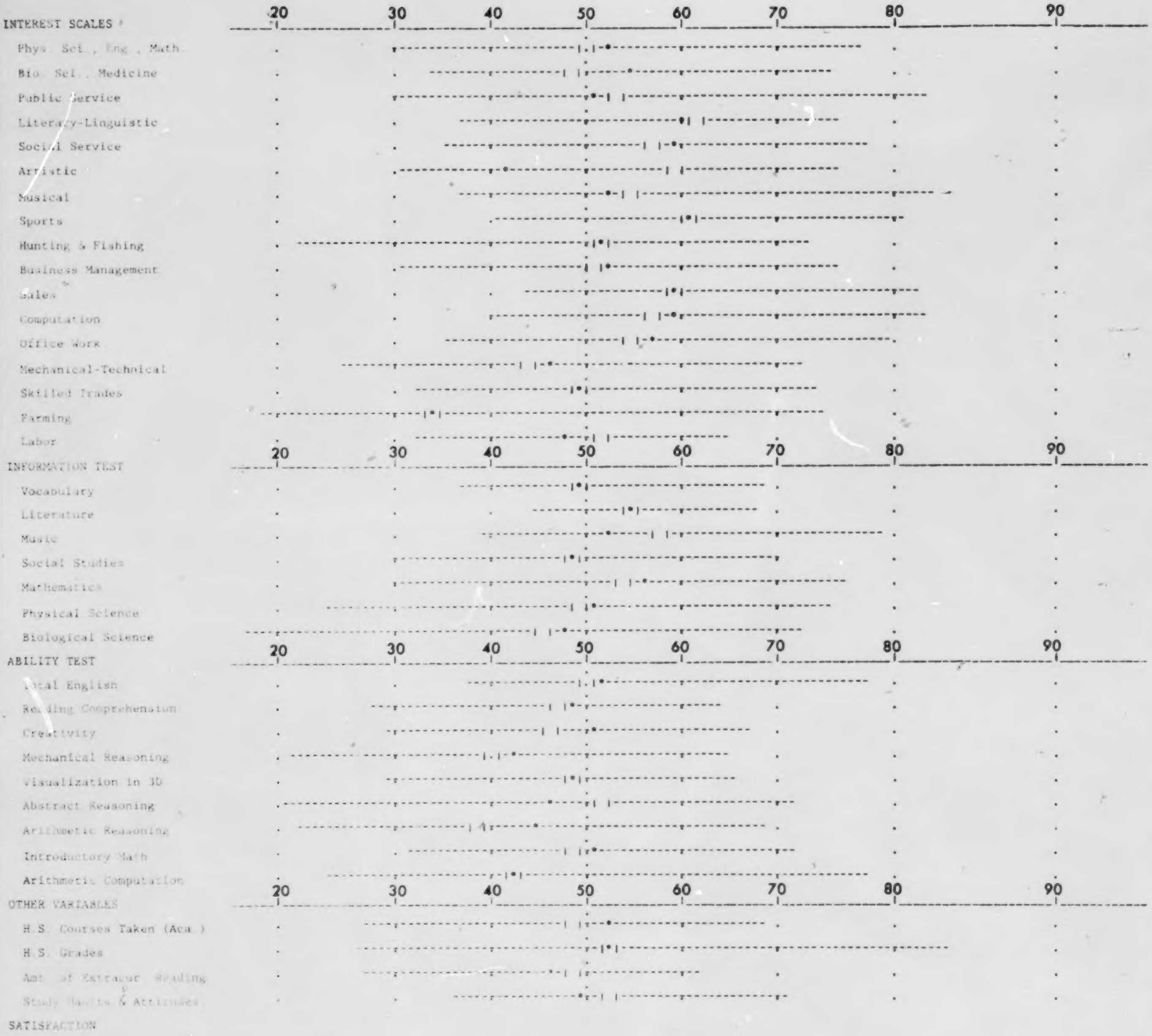
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Income Expected
Opportunity to Advance
Challenging Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Status
Income to Start
Friendliness of Co-workers

(* based on 61% of individuals in occupation)

PURCHASING AGENT

(n = 3 per 1000)



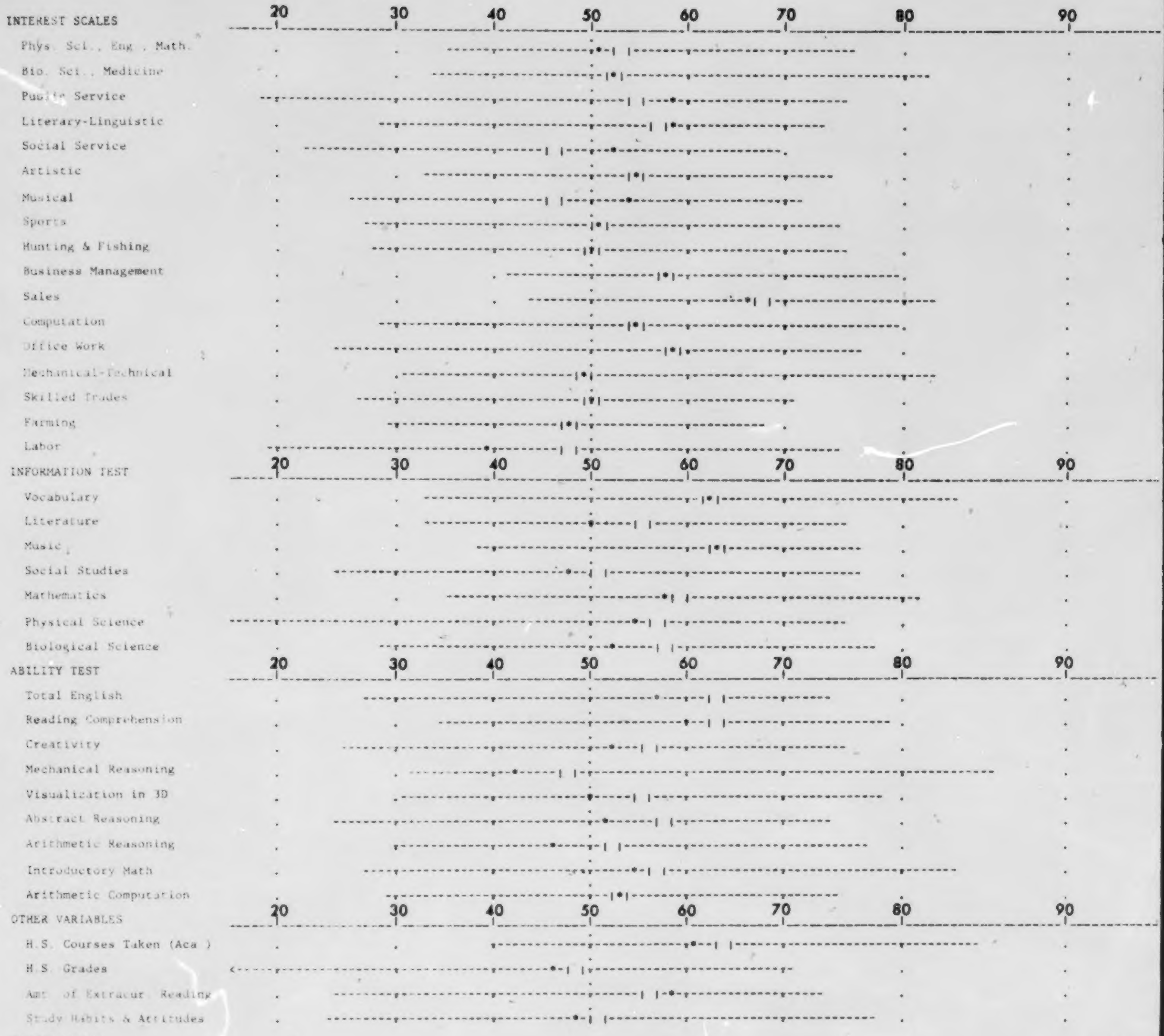
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
Interesting Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Length of Vacations
Relationship of Work to Prior Training

(* based on 72% of individuals in occupation)

REAL ESTATE SALES REPRESENTATIVE

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Interesting Work
Challenging Work
How Well I Can Do the Work

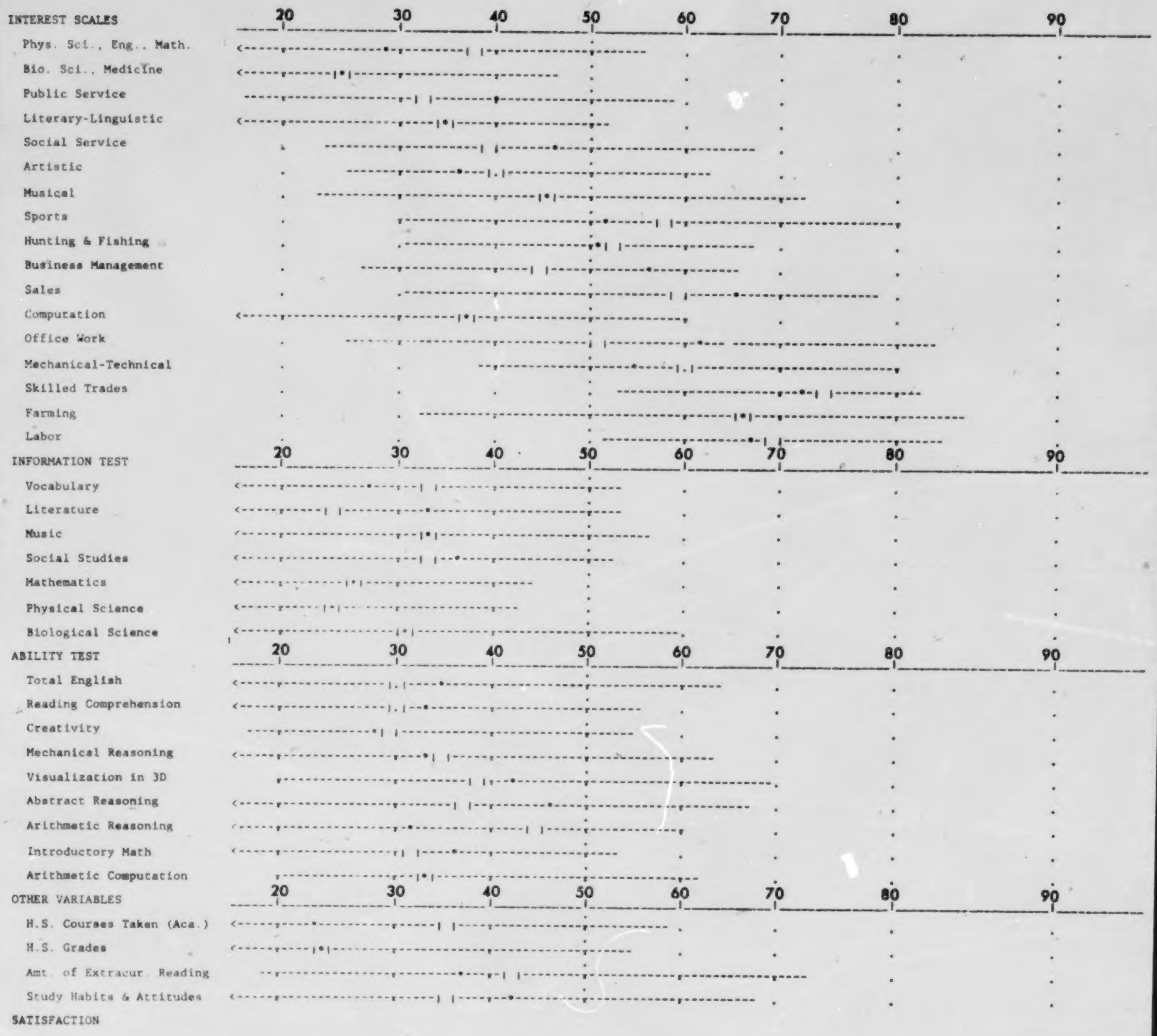
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Status
Job Security

(* based on 83% of individuals in occupation)

ROUTE/DELIVERY SALESWORKER

(n = 3 per 1000)



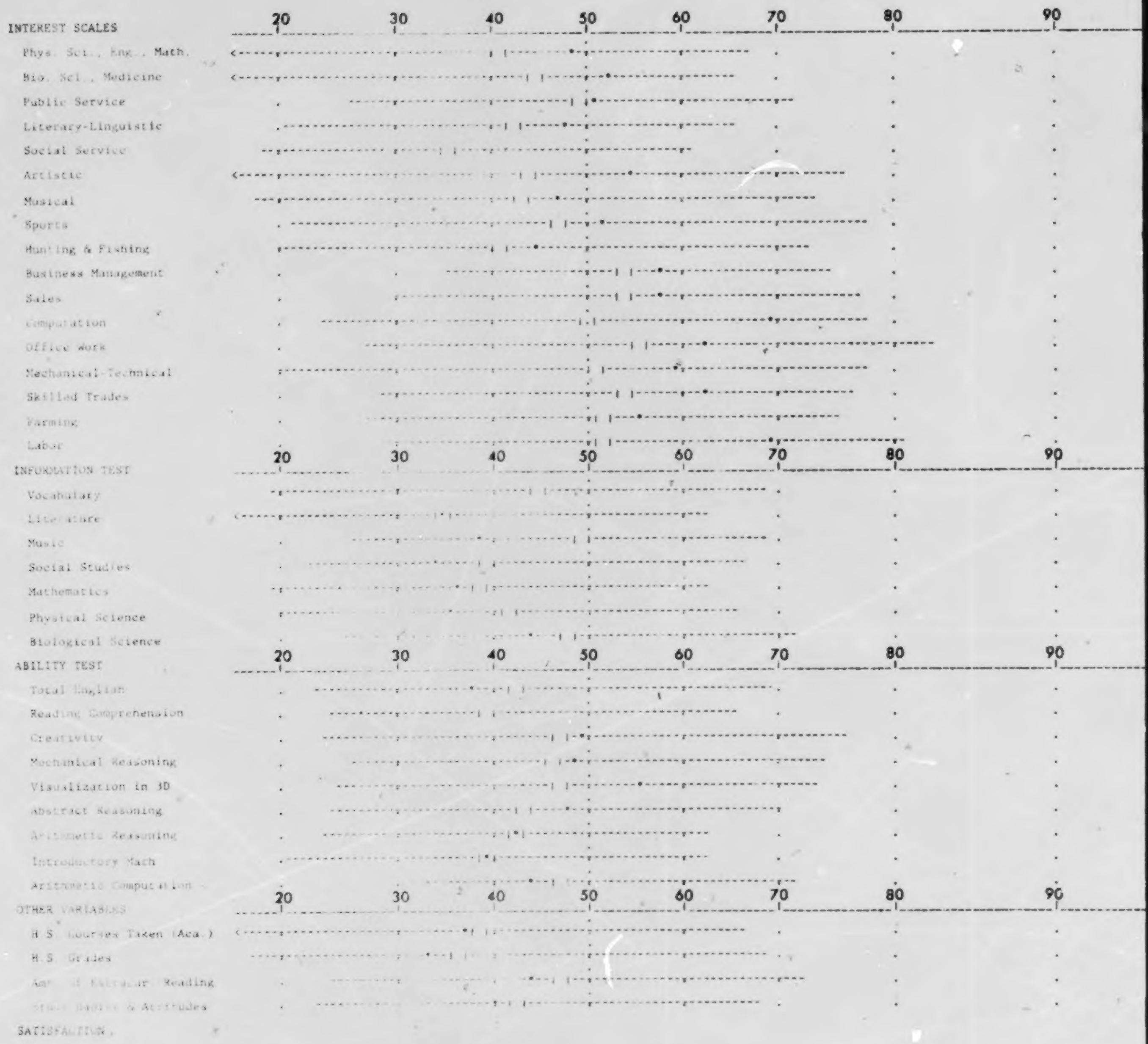
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Challenging Work
Relationship of Work to Prior Training

(* based on 45% of individuals in occupation)

SALESCLERK, CASHIER

(n = 11 per 1000)



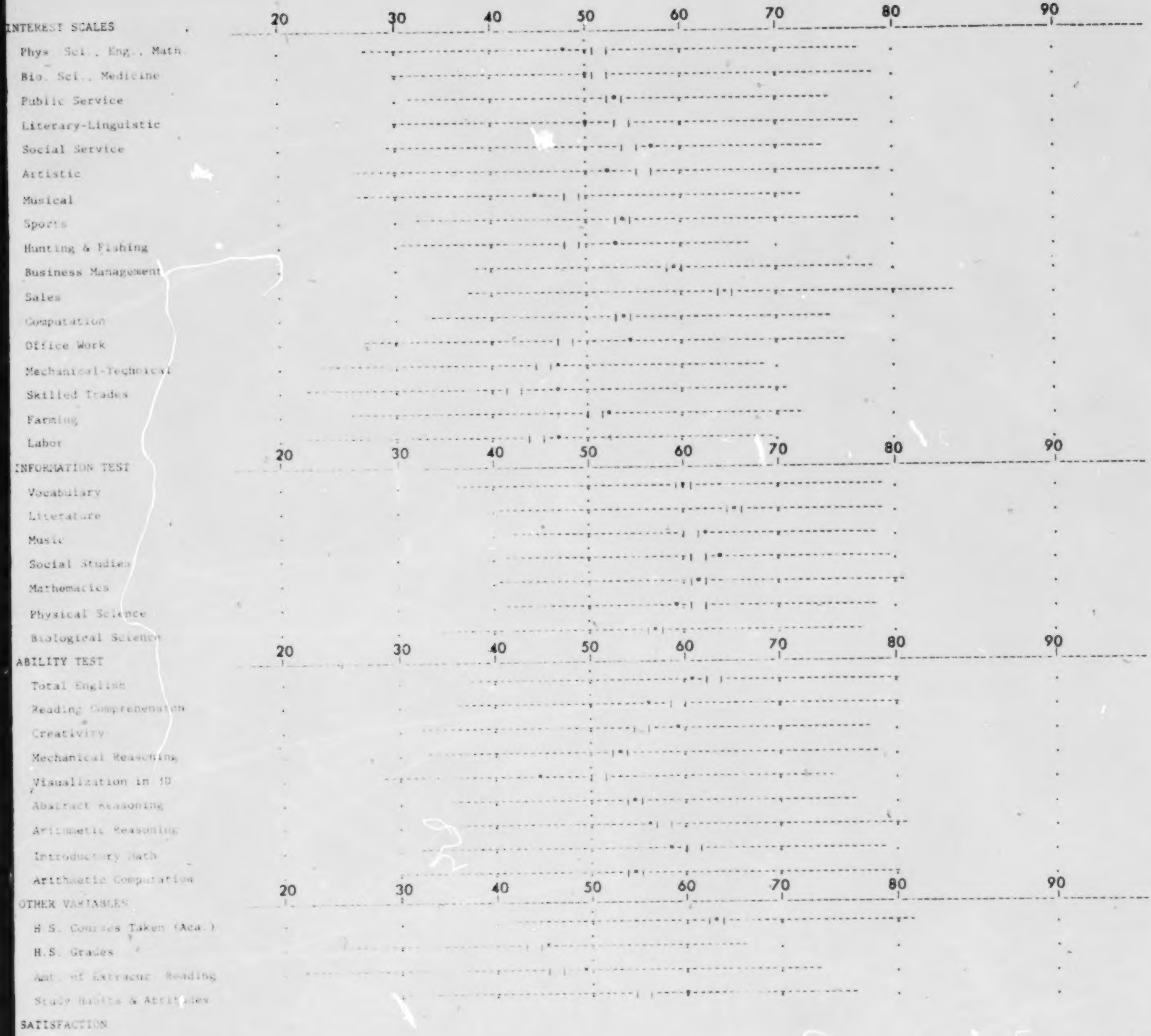
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Relationship of Work to Prior Training
Income Expected

(* based on 50% of individuals in occupation)

SALESWORKER (INCLUDING SALES ENGINEER)

(n = 17 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Interesting Work
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Income to Start
Relationship of Work to Prior Training

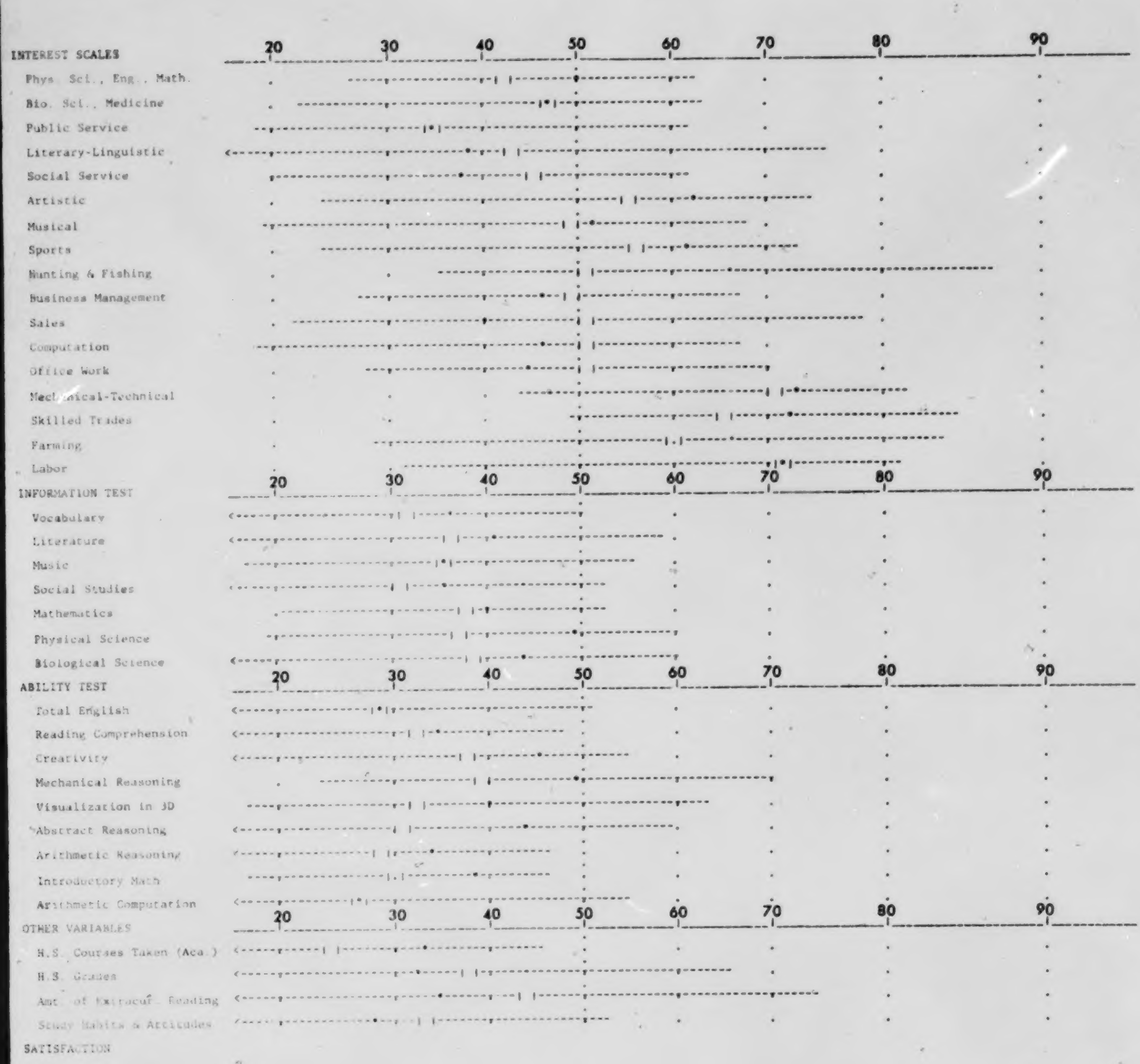
(* based on 65% of individuals in occupation)

CAREER GROUP 9

MECHANICS, INDUSTRIAL TRADES

AIRPLANE MECHANIC

(n = 2 per 1000)



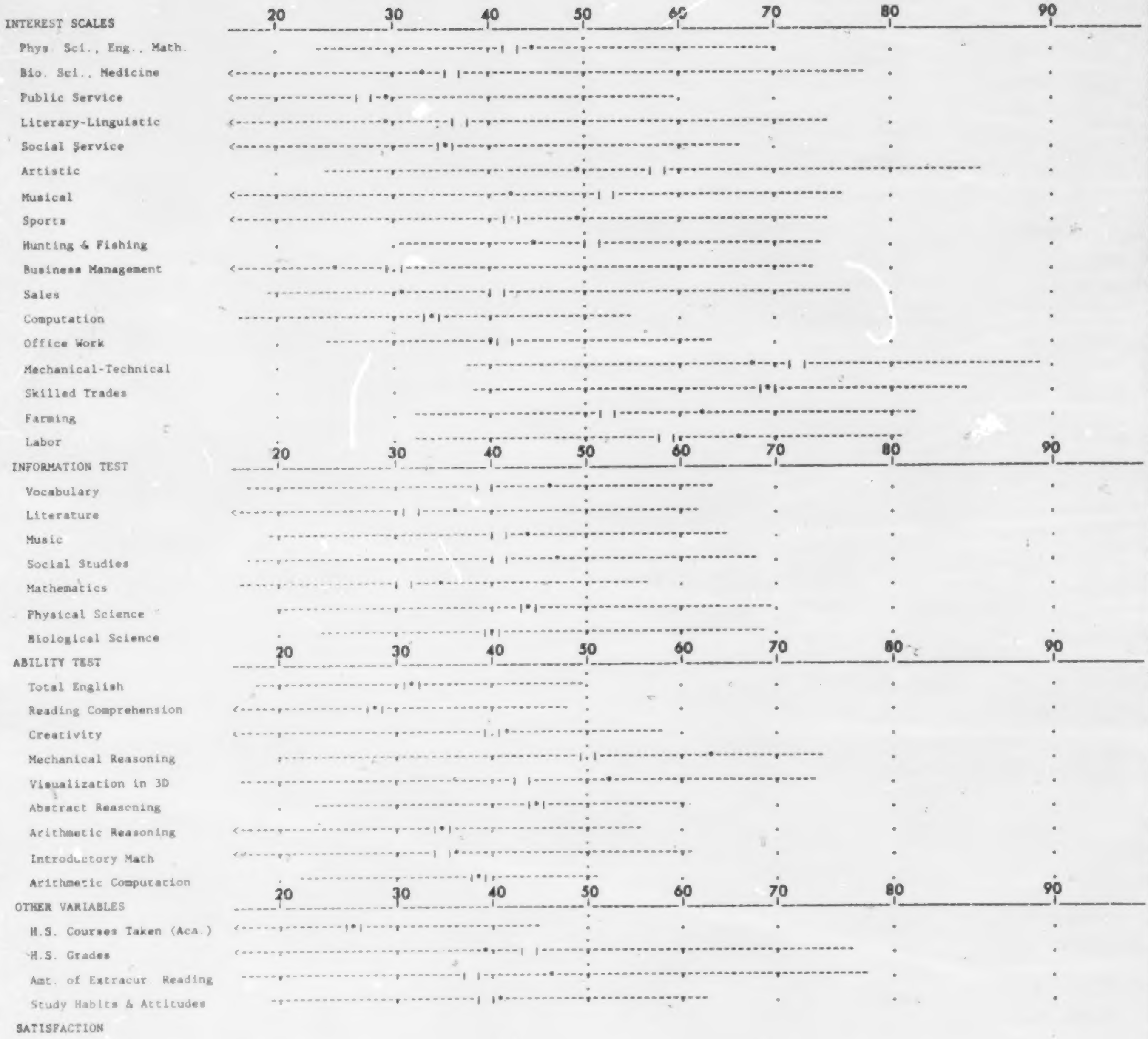
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Importance of Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Work Week
Quality of Surroundings
Status

(* based on 54% of individuals in occupation)

APPLIANCE REPAIR WORKER

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Job Security
Relationship of Work to Prior Training

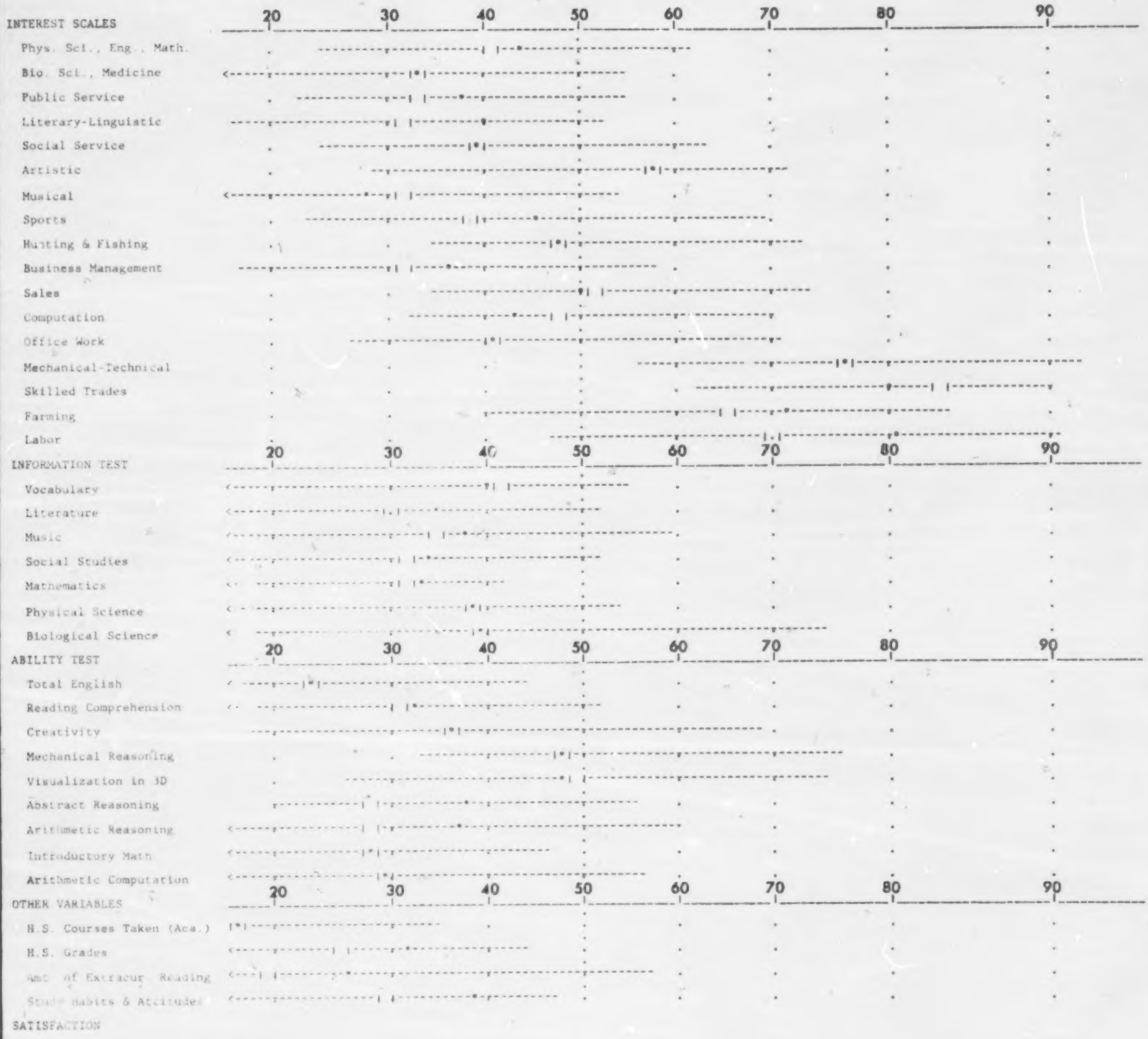
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Quality of Surroundings
Opportunity to Advance

(* based on 50% of individuals in occupation)

AUTO MECHANIC

(n = 5 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Relationship of Work to Prior Training
Interesting Work

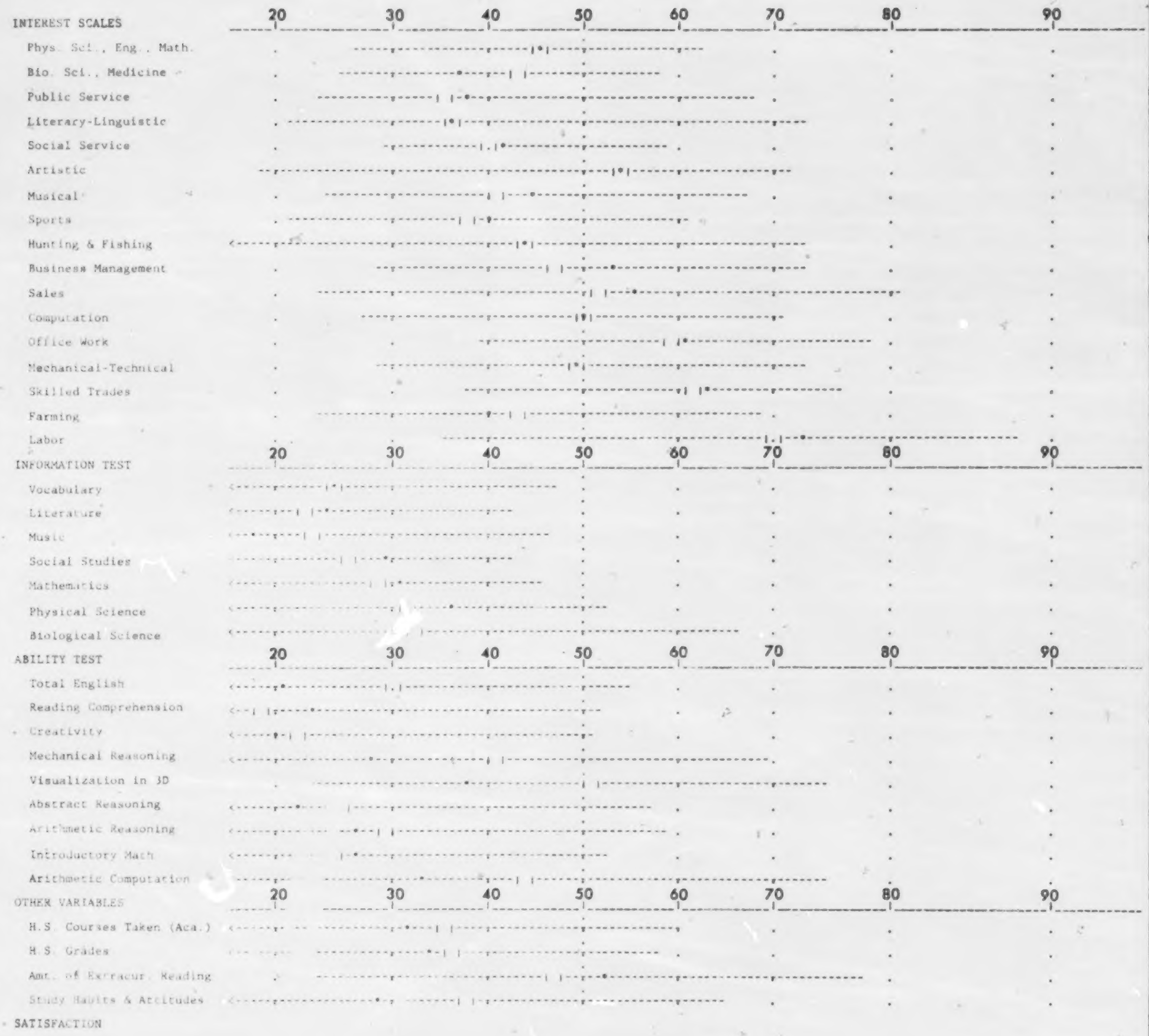
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 65% of individuals in occupation)

CLOTHING/FASHION TRADES WORKER

(n = 3 per 1000)



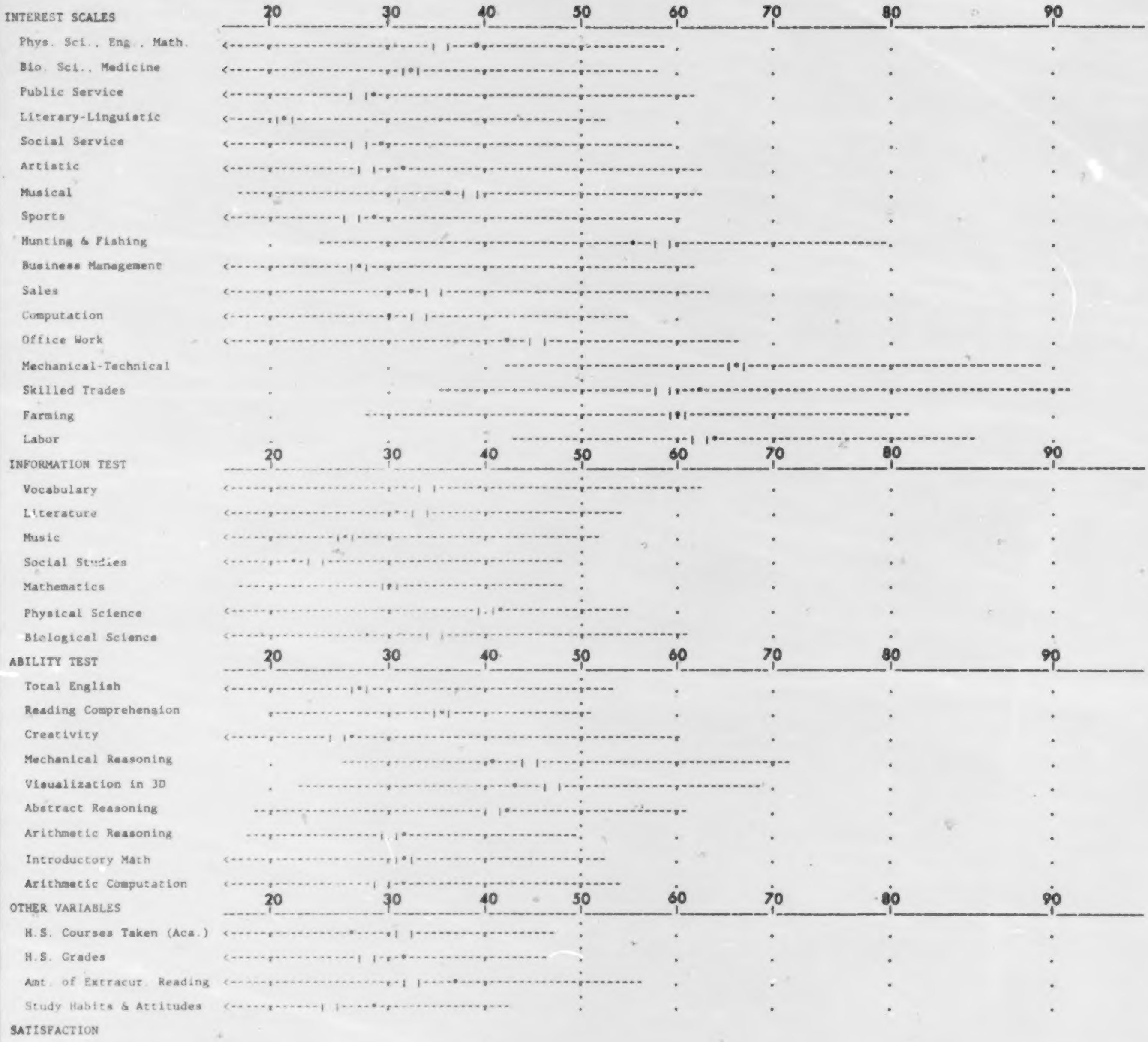
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Challenging Work
Status

(* based on 52% of individuals in occupation)

DIESEL AND OTHER SPECIALIZED MECHANIC

(n = 5 per 1000)



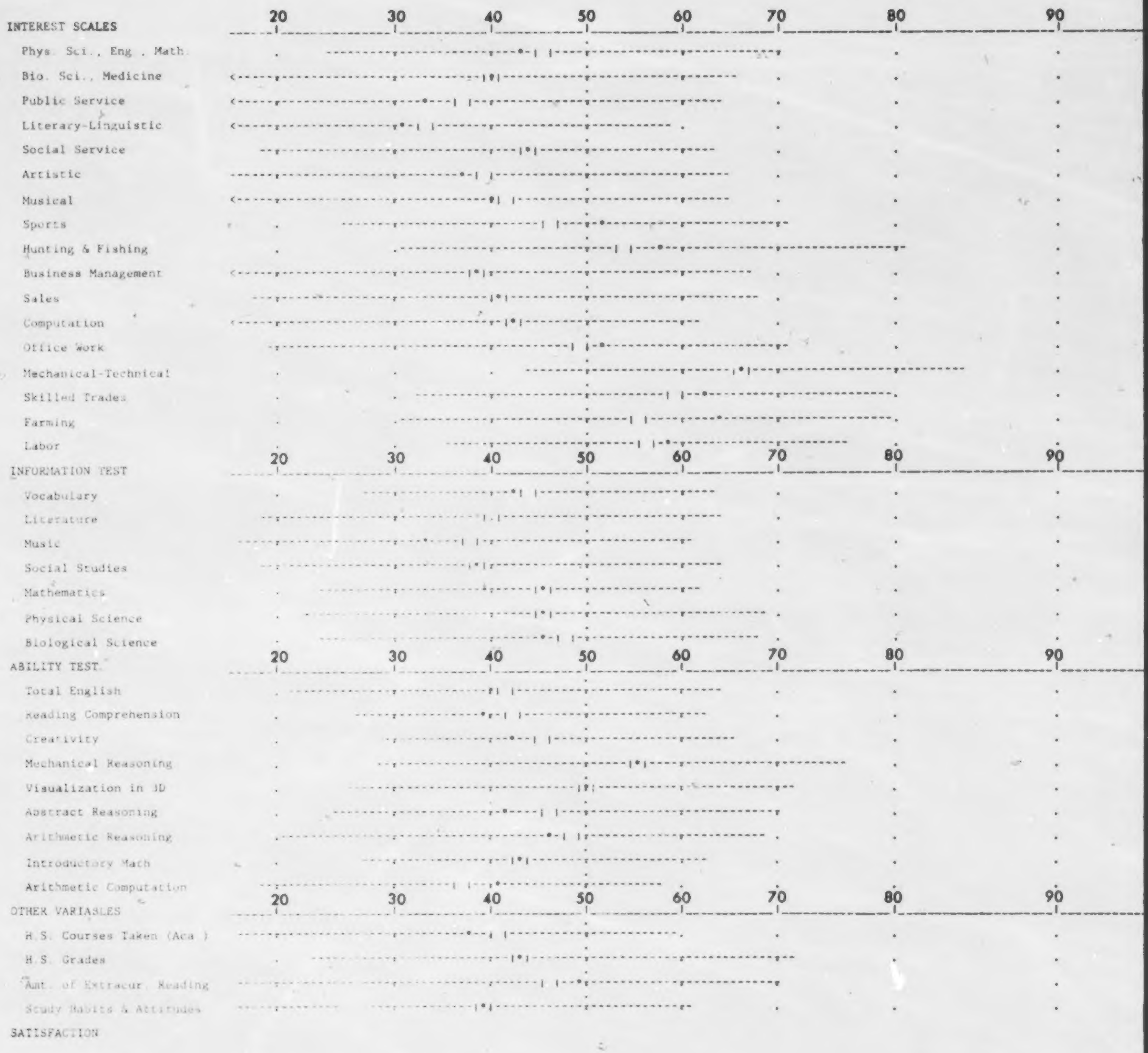
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Job Security
Importance of Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Length of Work Week
Opportunity to Advance

(* based on 67% of individuals in occupation)

ELECTRICIAN

(n = 14 per 1000)



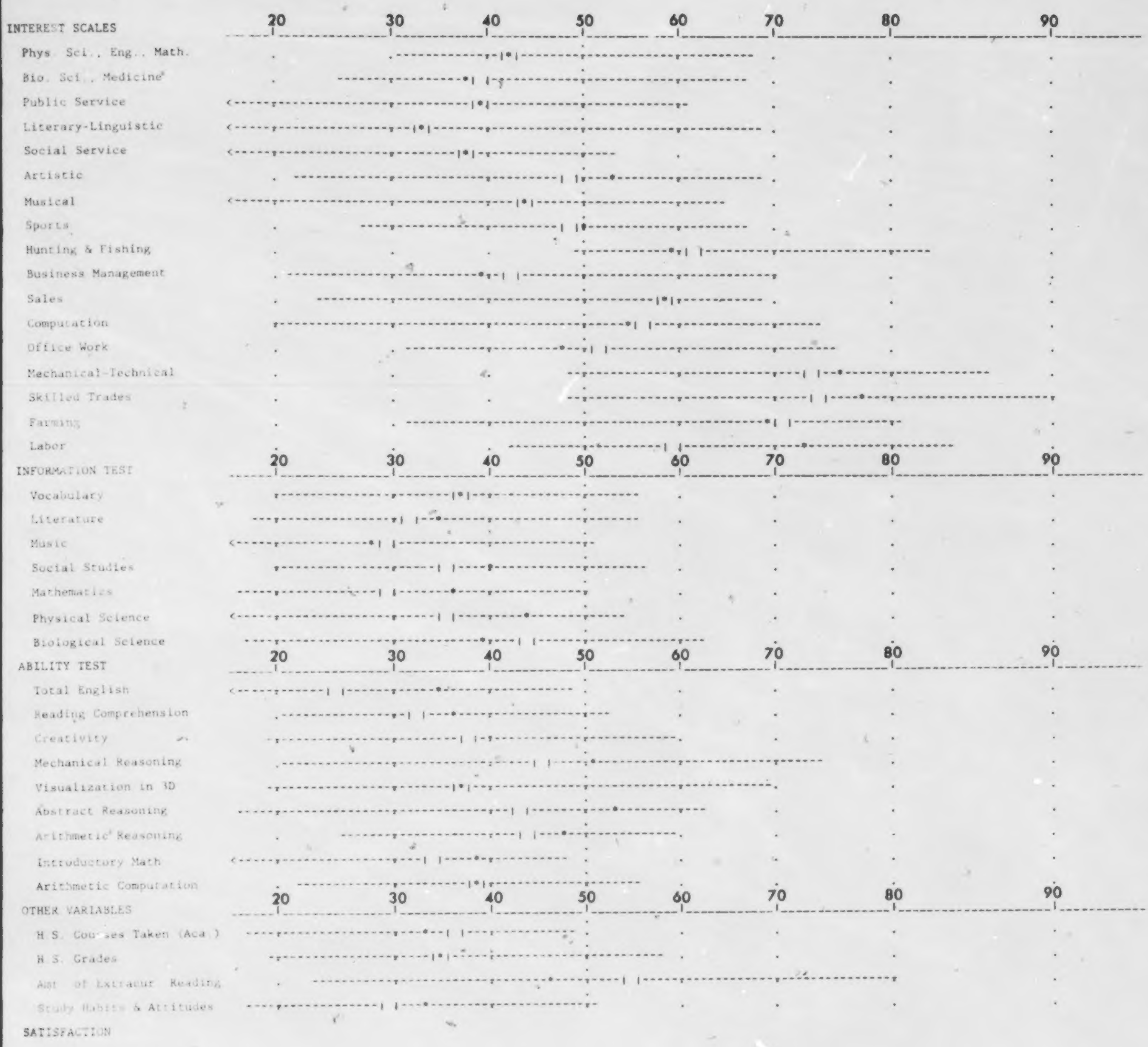
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Quality of Surroundings

(* based on 68% of individuals in occupation)

INDUSTRIAL MACHINE REPAIR WORKER

(n = 2 per 1000)



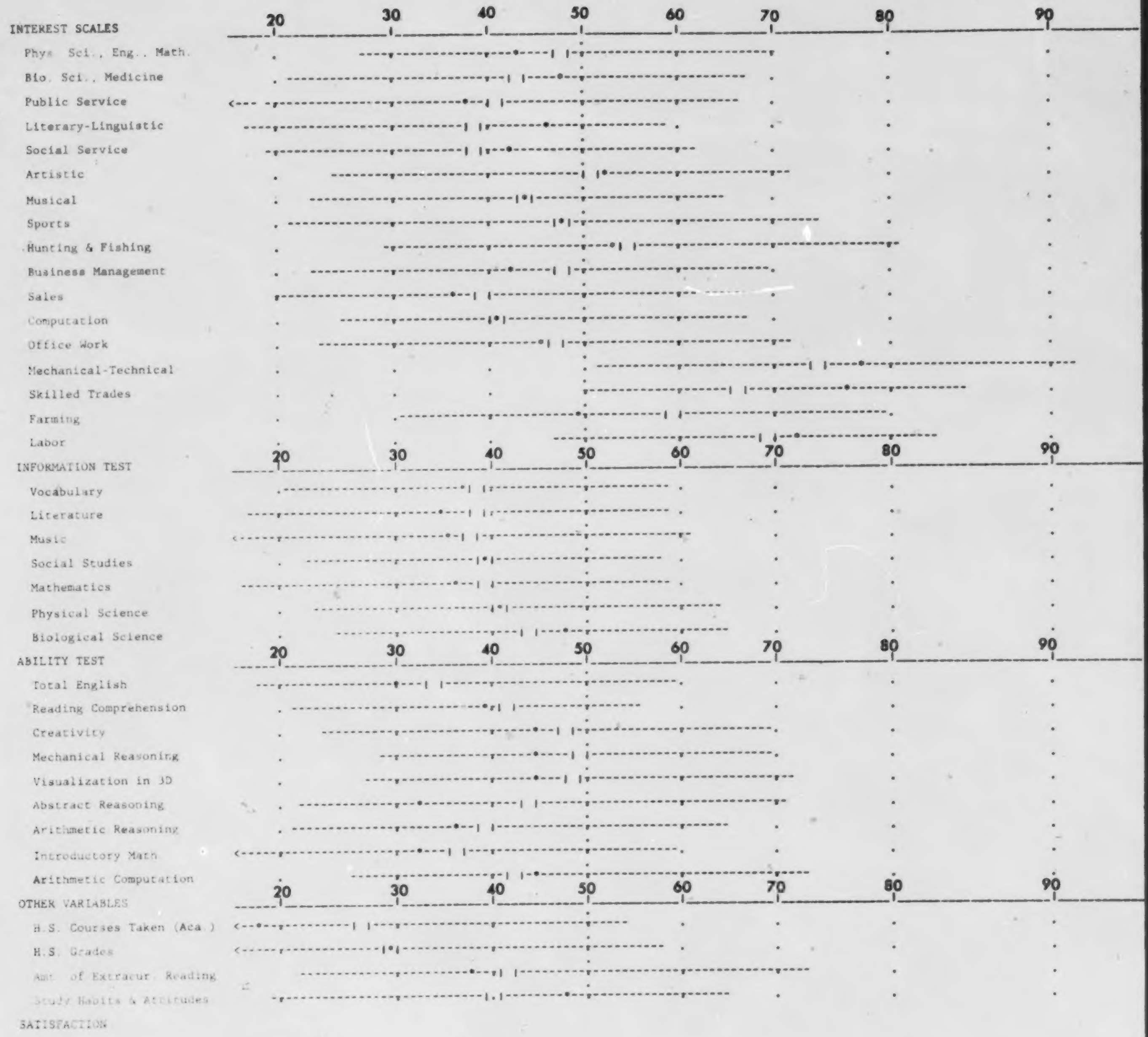
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Quality of Surroundings
Opportunity to Advance
Importance of Work

(* based on 66% of individuals in occupation)

MACHINIST

(n = 9 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

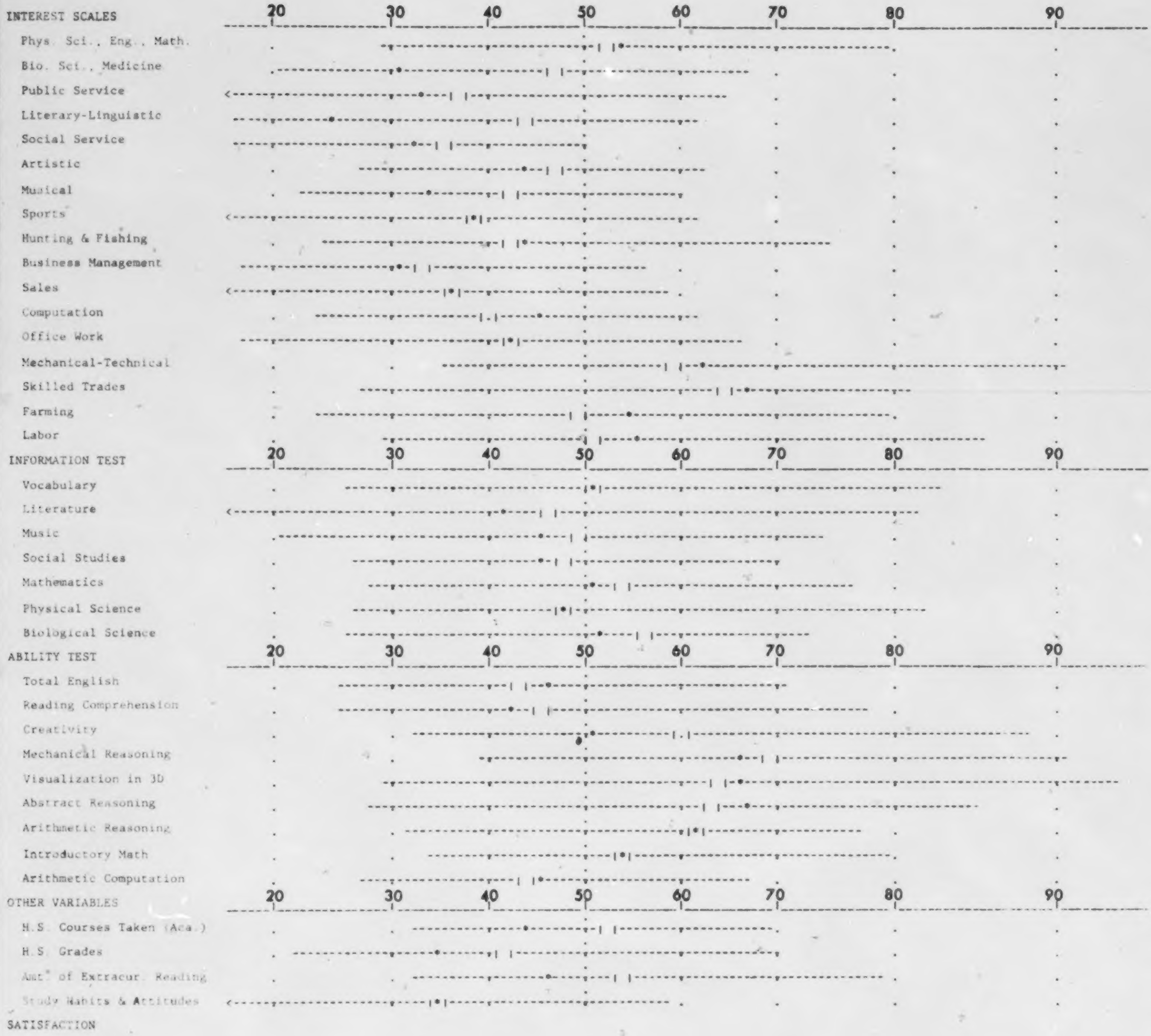
Opportunity to Advance
Quality of Surroundings
Income to Start

(* based on 56% of individuals in occupation)

OFFICE/SMALL MACHINE REPAIR WORKER

(Office Machine Repair Worker (51%), Small Machine Repair Worker (49%))

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Job Security
Interesting Work

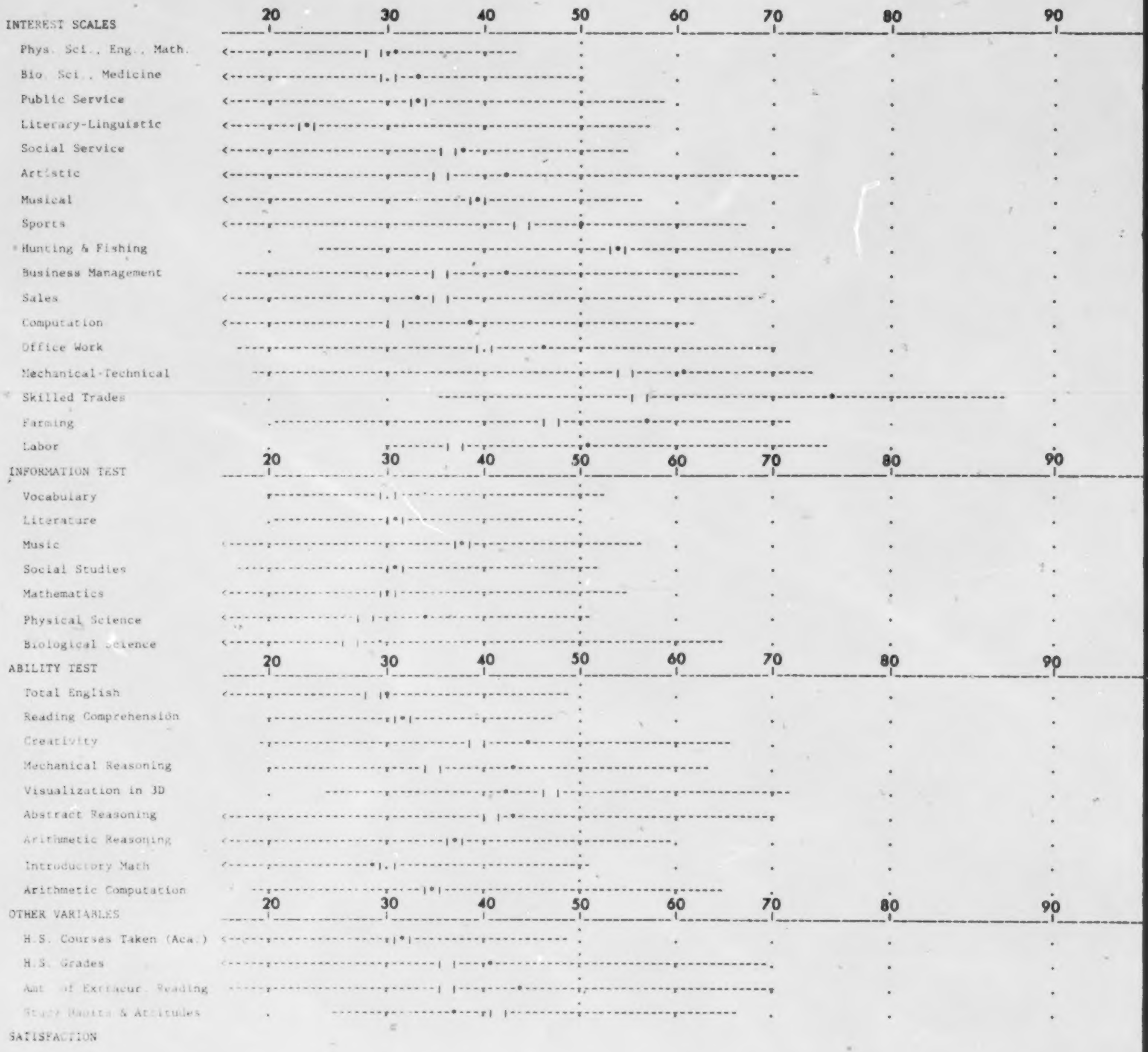
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income to Start
Length of Vacations
Opportunity to Advance

(* based on 76% of individuals in occupation)

PRINTING TRADES WORKER

(n = 4 per 1000)



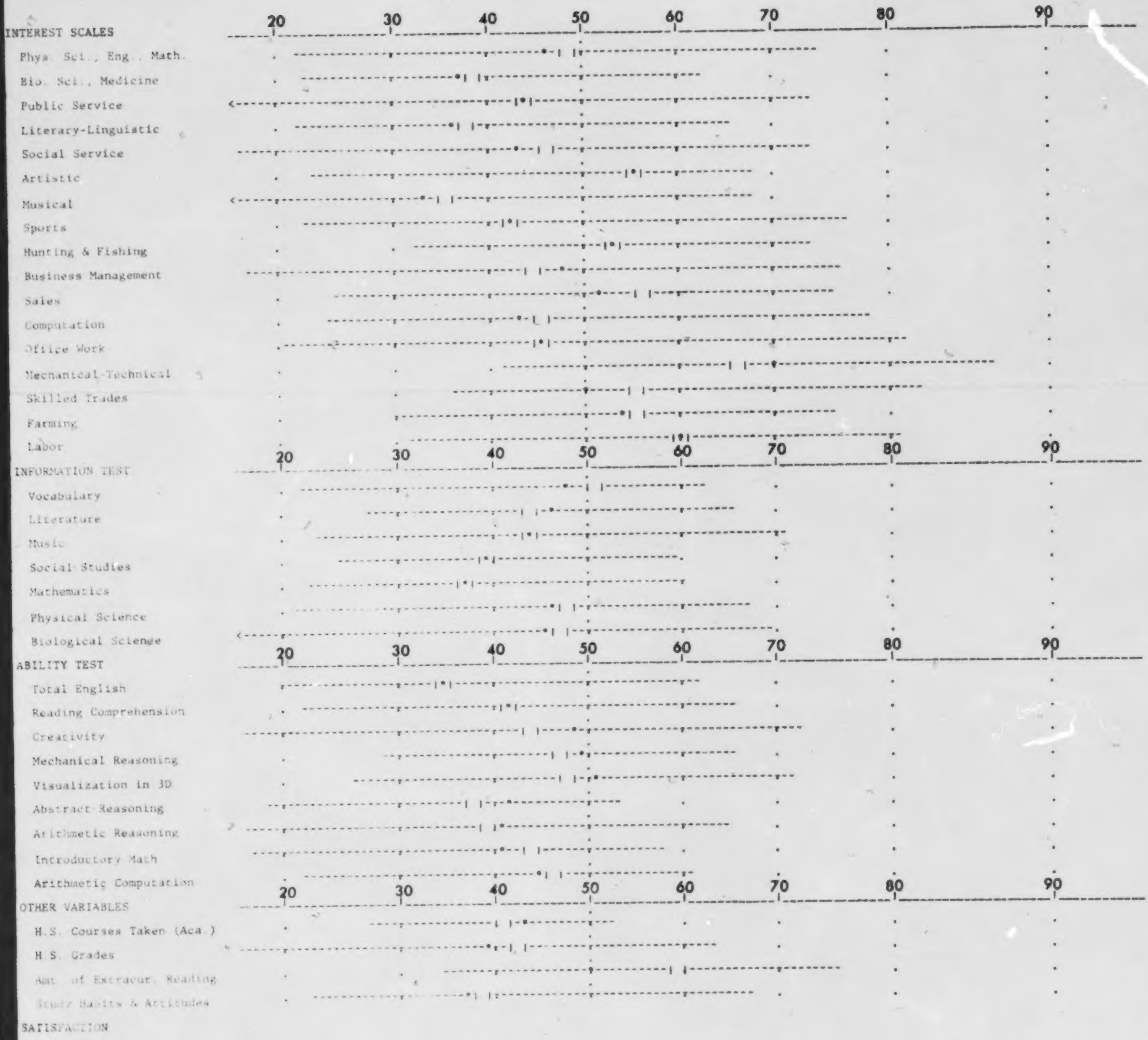
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Quality of Surroundings

(* based on 52% of individuals in occupation)

TELEPHONE REPAIR WORKER

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Friendliness of Co-workers
Job Security
Importance of Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Length of Vacations
Length of Work Week
Income to Start

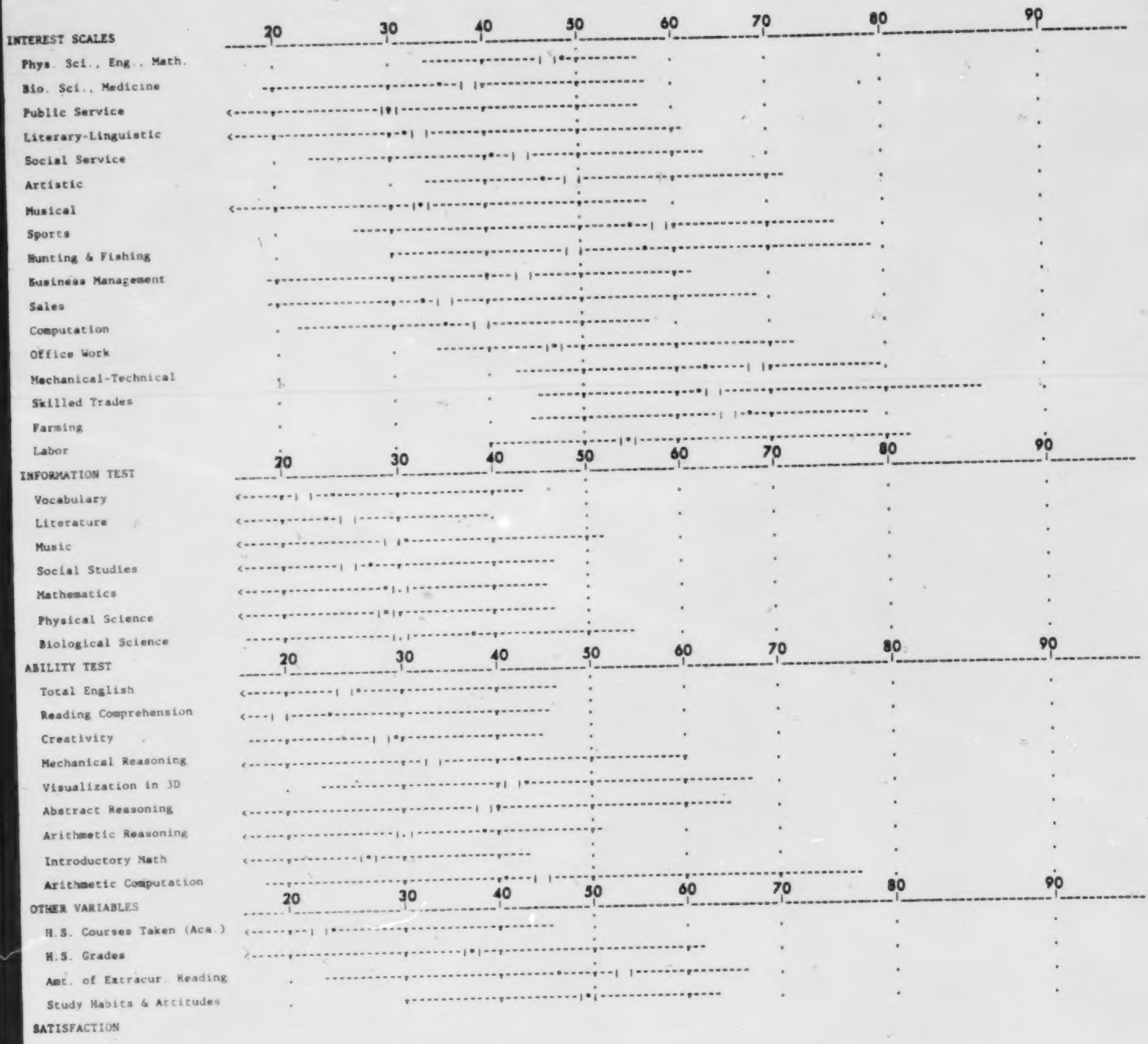
(* based on 68% of individuals in occupation)

CAREER GROUP 10

CONSTRUCTION TRADES

CARPENTER

(n = 6 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

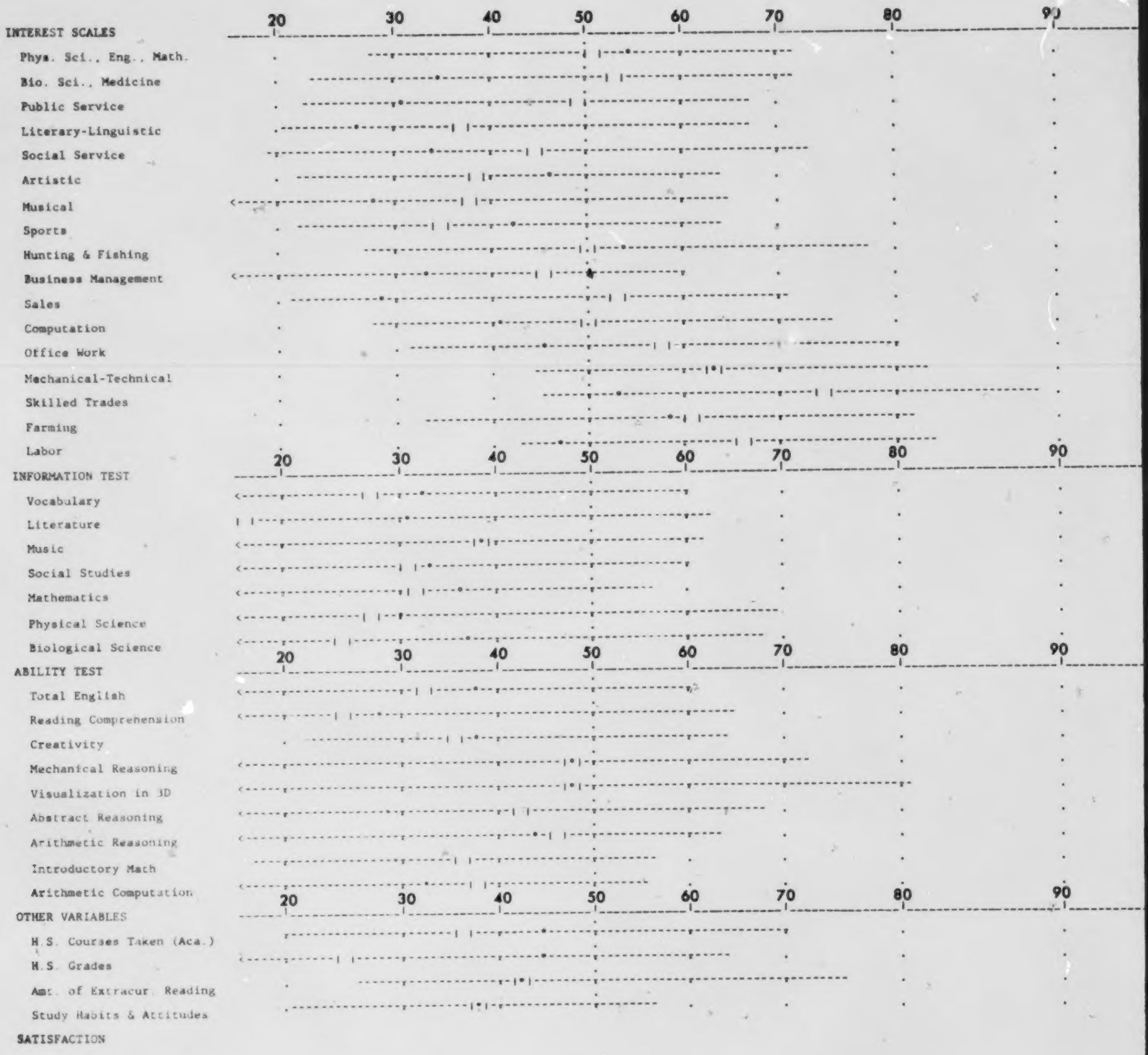
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Status
Relationship of Work to Prior Training
Opportunity to Advance

(* based on 72% of individuals in occupation)

EXPLOSIVES/MUNITIONS WORKER AND OTHER CONSTRUCTION SPECIALISTS

(n = 4 per 1000)



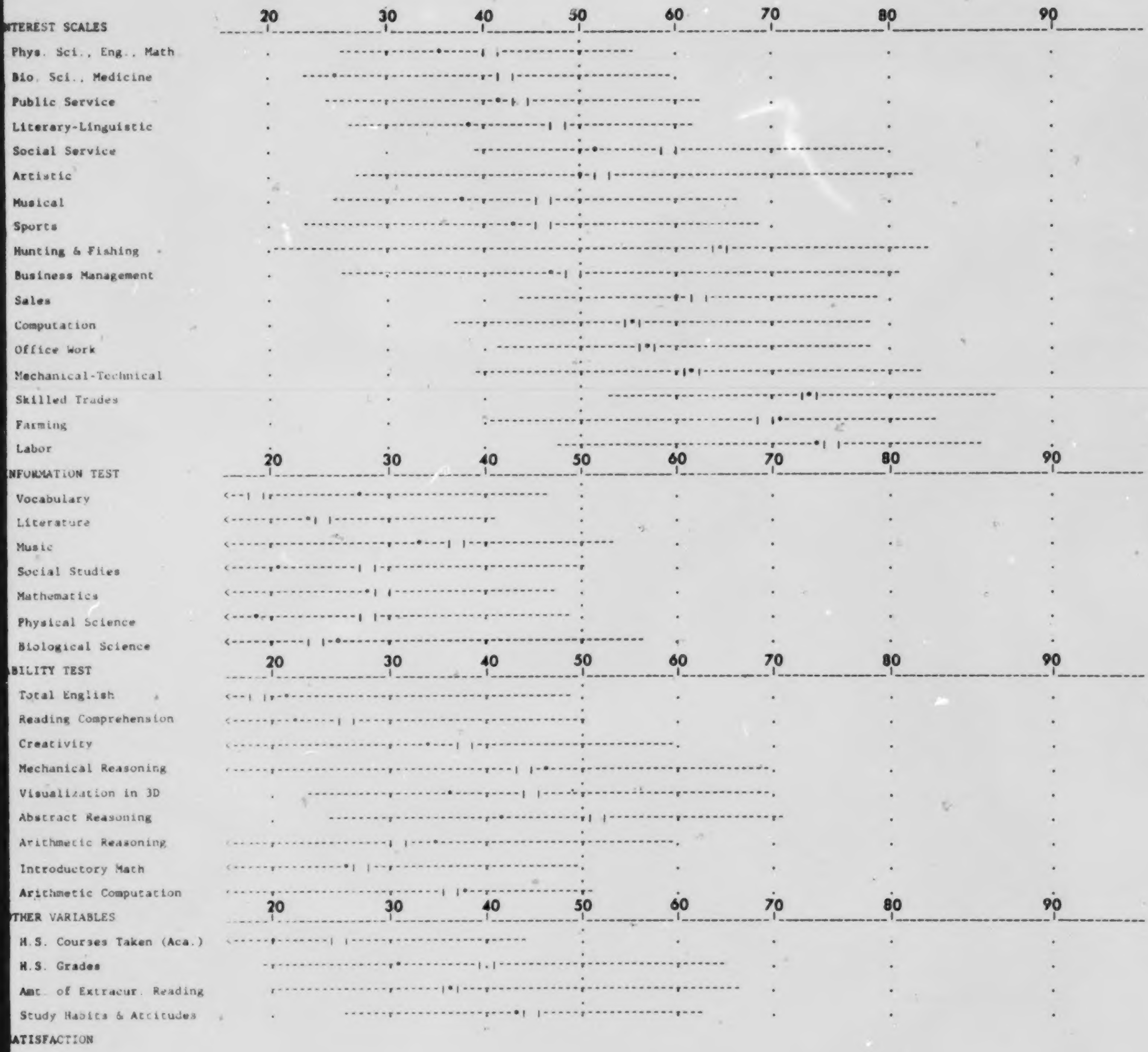
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Income to Start

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Status
Challenging Work
Job Security

(* based on 41% of individuals in occupation)

MASON, ROOFER, PLASTERER

(n = 7 per 1000)



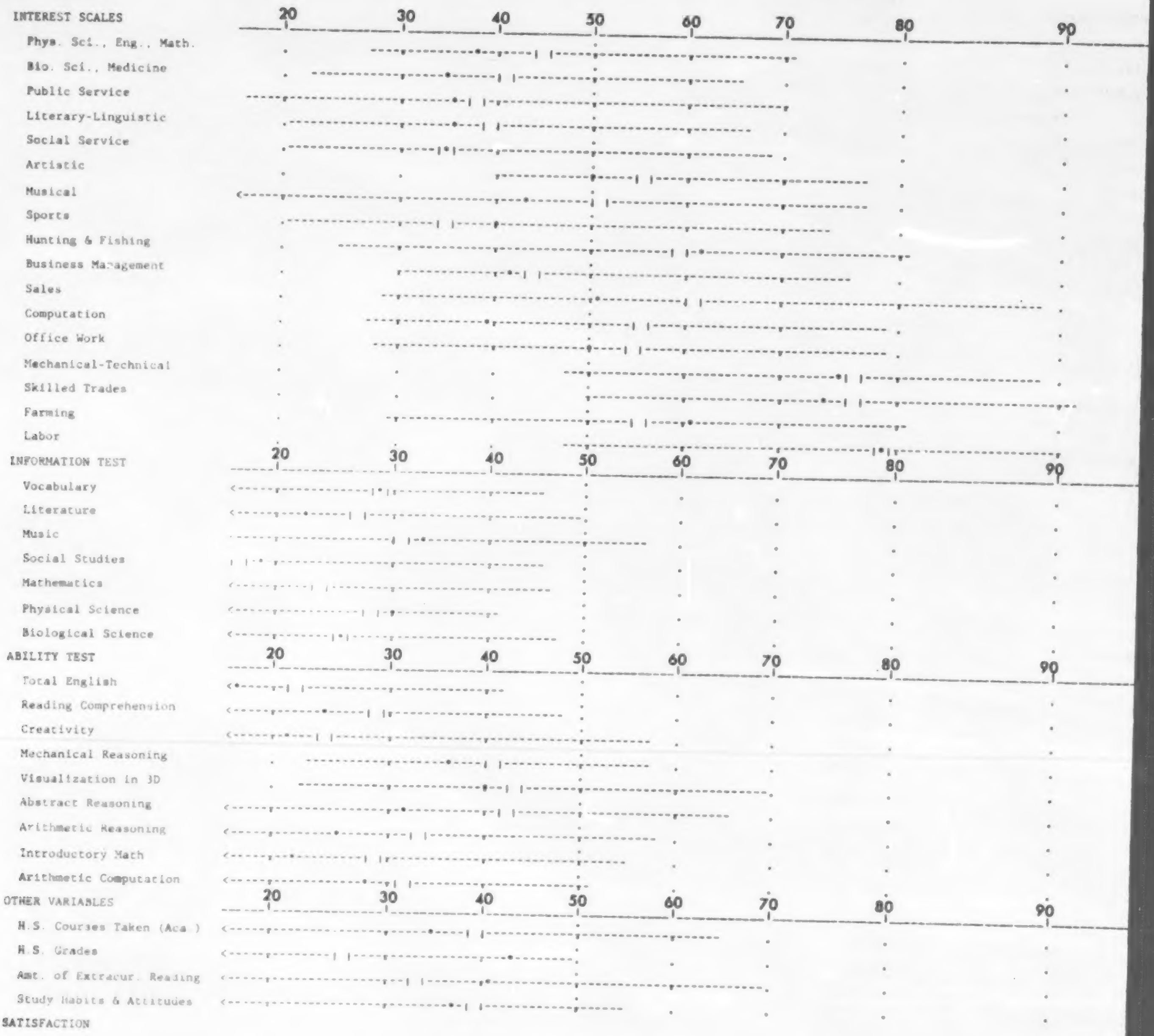
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Challenging Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Relationship of Work to Prior Training
Job Security

(* based on 54% of individuals in occupation)

METAL TRADES WORKER

(n = 7 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

- How Well I Can Do the Work
- Friendliness of Co-workers
- Challenging Work

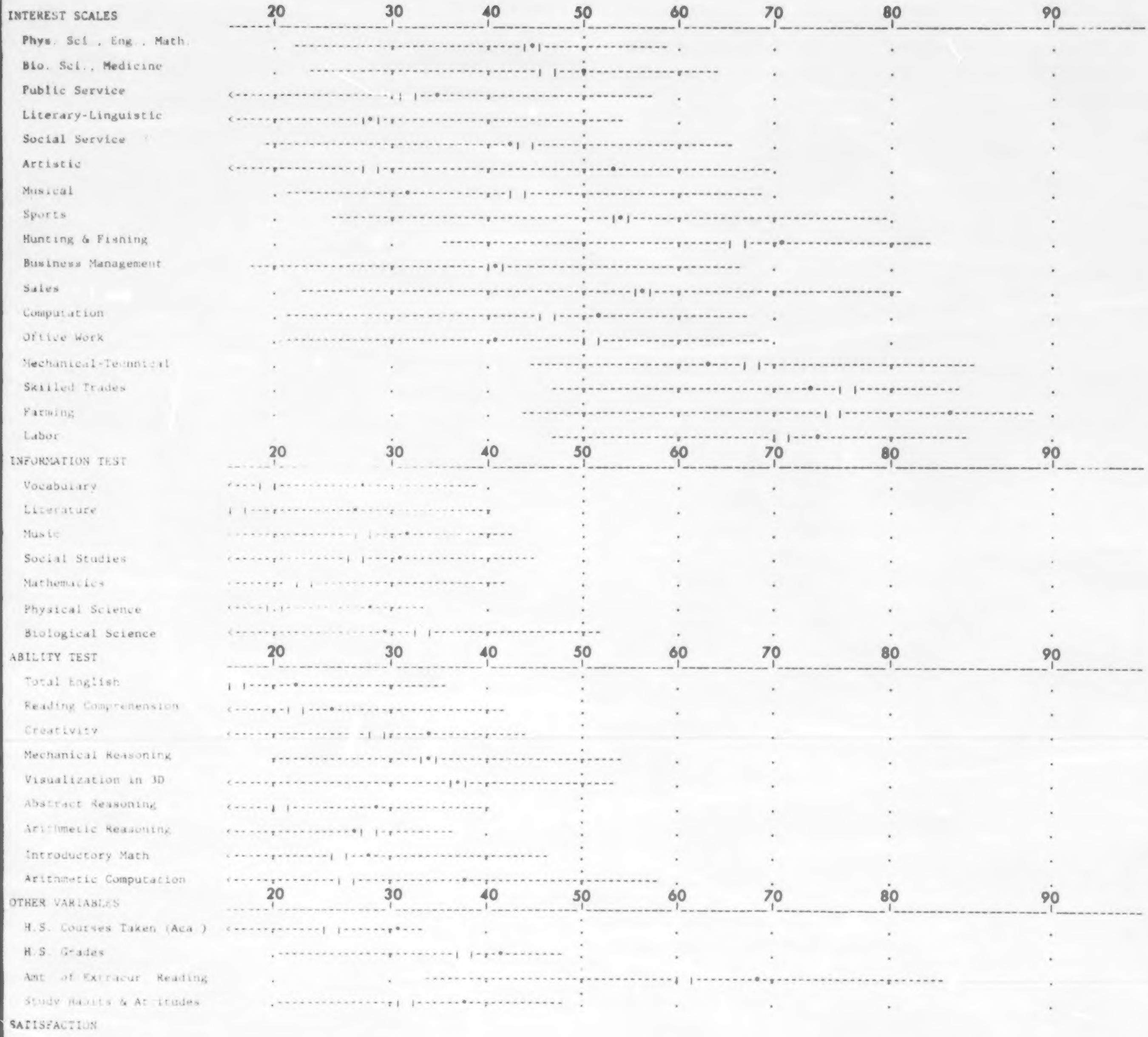
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

- Opportunity to Advance
- Length of Vacations
- Quality of Surroundings

(* based on 54% of individuals in occupation)

MINER, WELL DRILLER

(n = 2 per 1000)



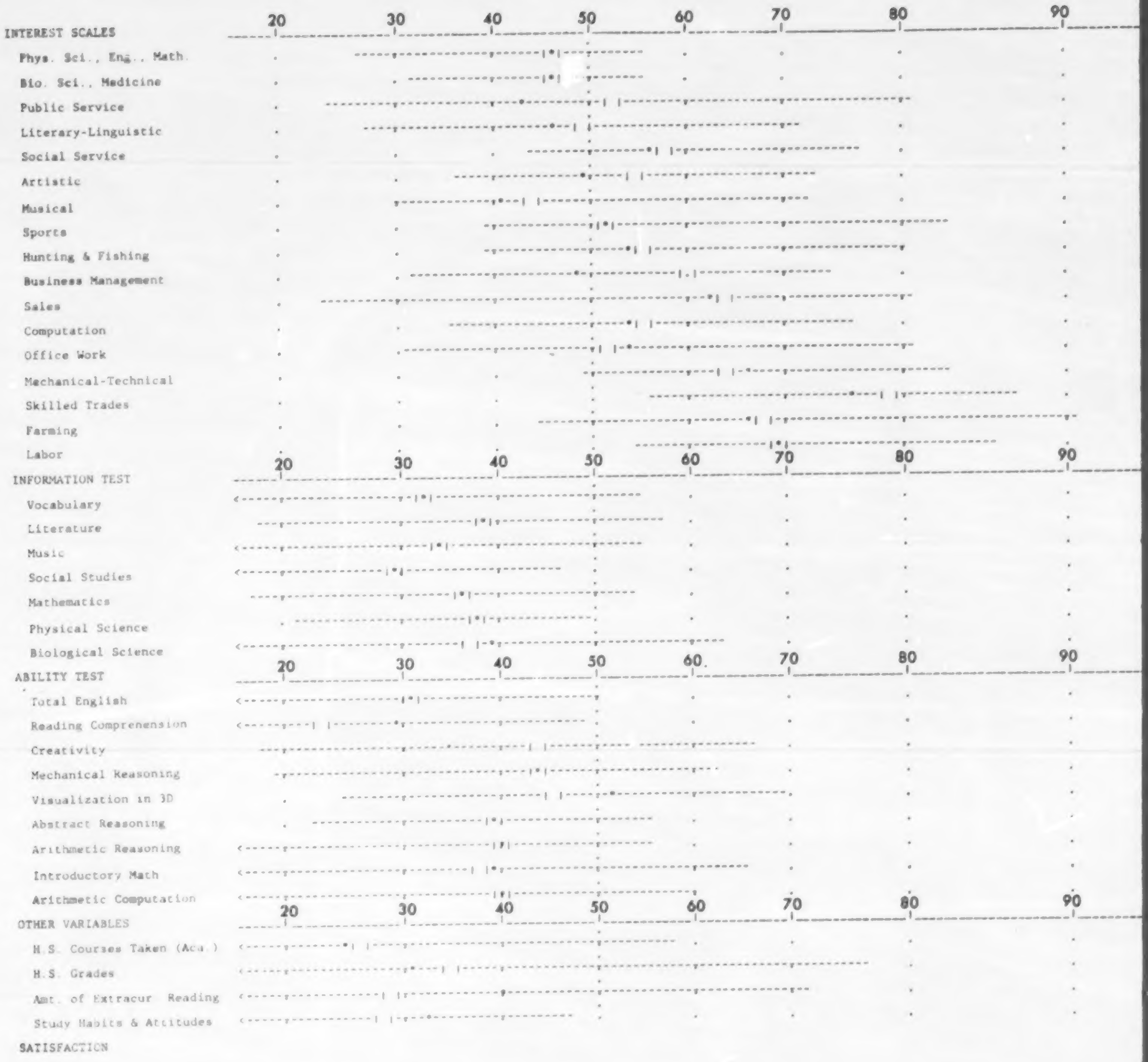
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Job Security
Friendliness of Co-workers
Income Expected

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Quality of Surroundings
Opportunity to Advance
Challenging Work

(* based on 17% of individuals in occupation)

PLUMBER, PIPEFITTER

(n = 5 per 1000)



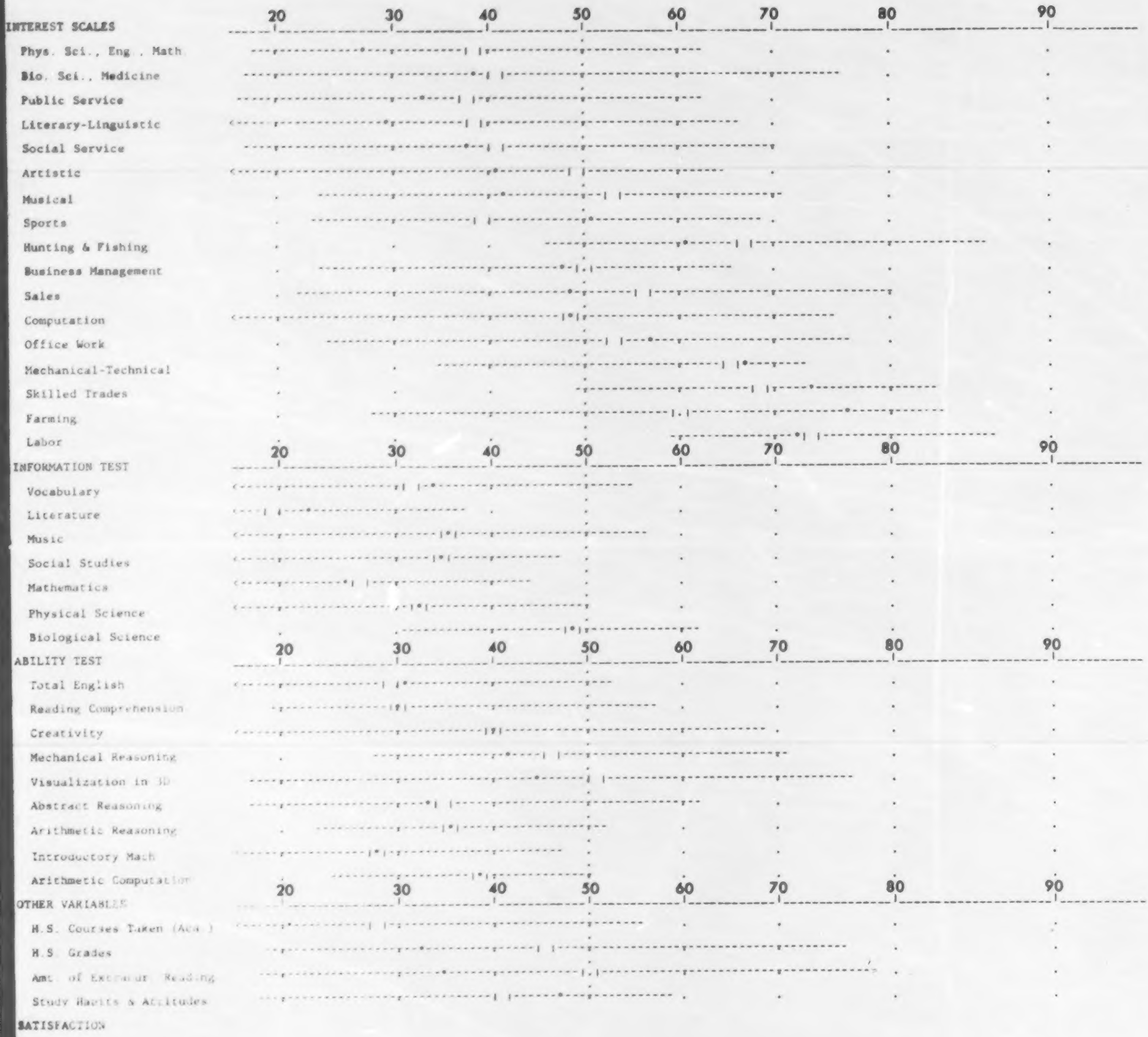
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Challenging Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Work Week
Quality of Surroundings
Opportunity to Advance

(* based on 68% of individuals in occupation)

ROAD CONSTRUCTION WORKER

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Income to Start

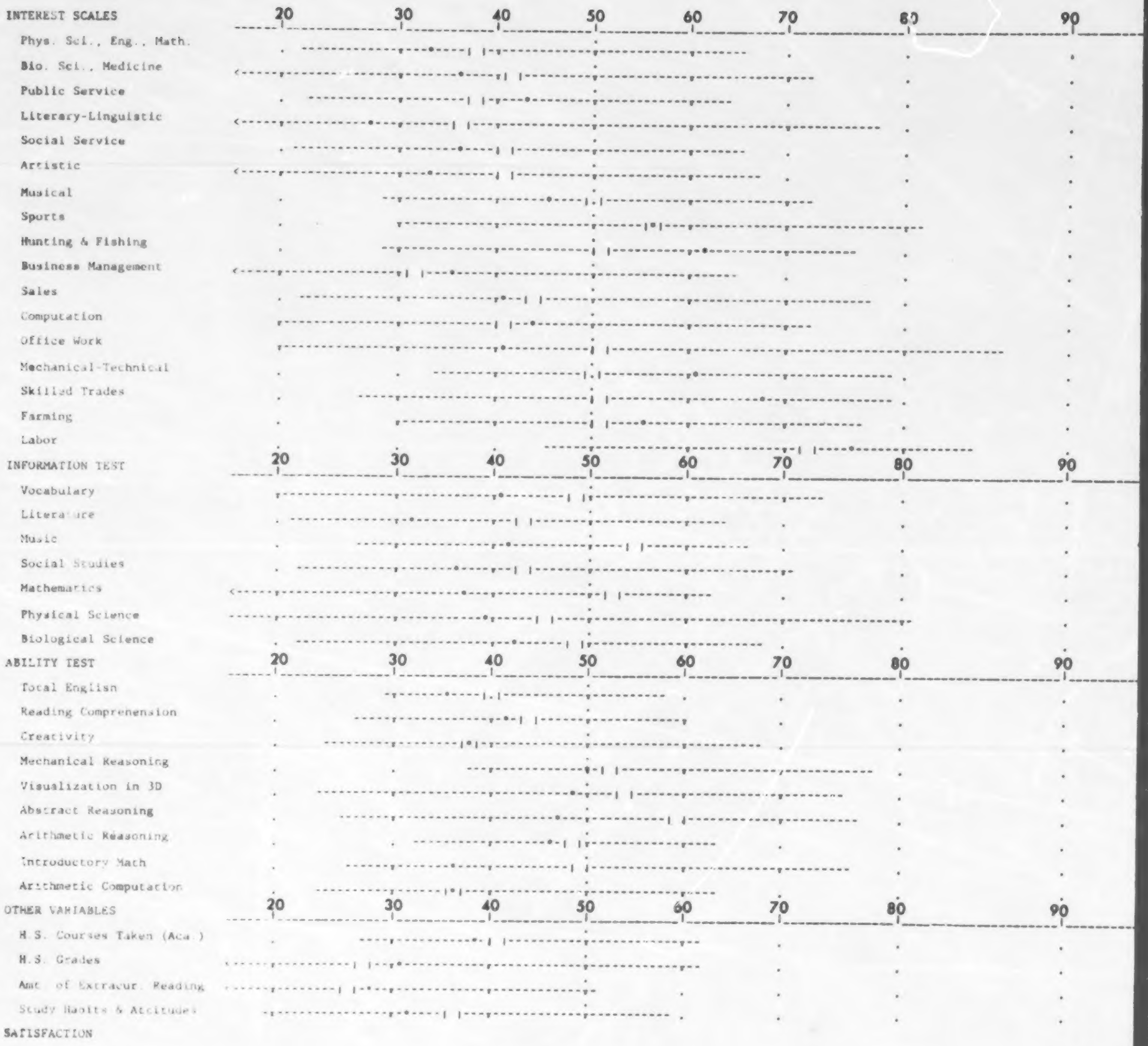
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Quality of Surroundings
Interesting Work
Relationship of Work to Prior Training

(* based on 60% of individuals in occupation)

SHIFT LEADER

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Importance of Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Relationship of Work to Prior Training
Quality of Surroundings
Opportunity to Advance

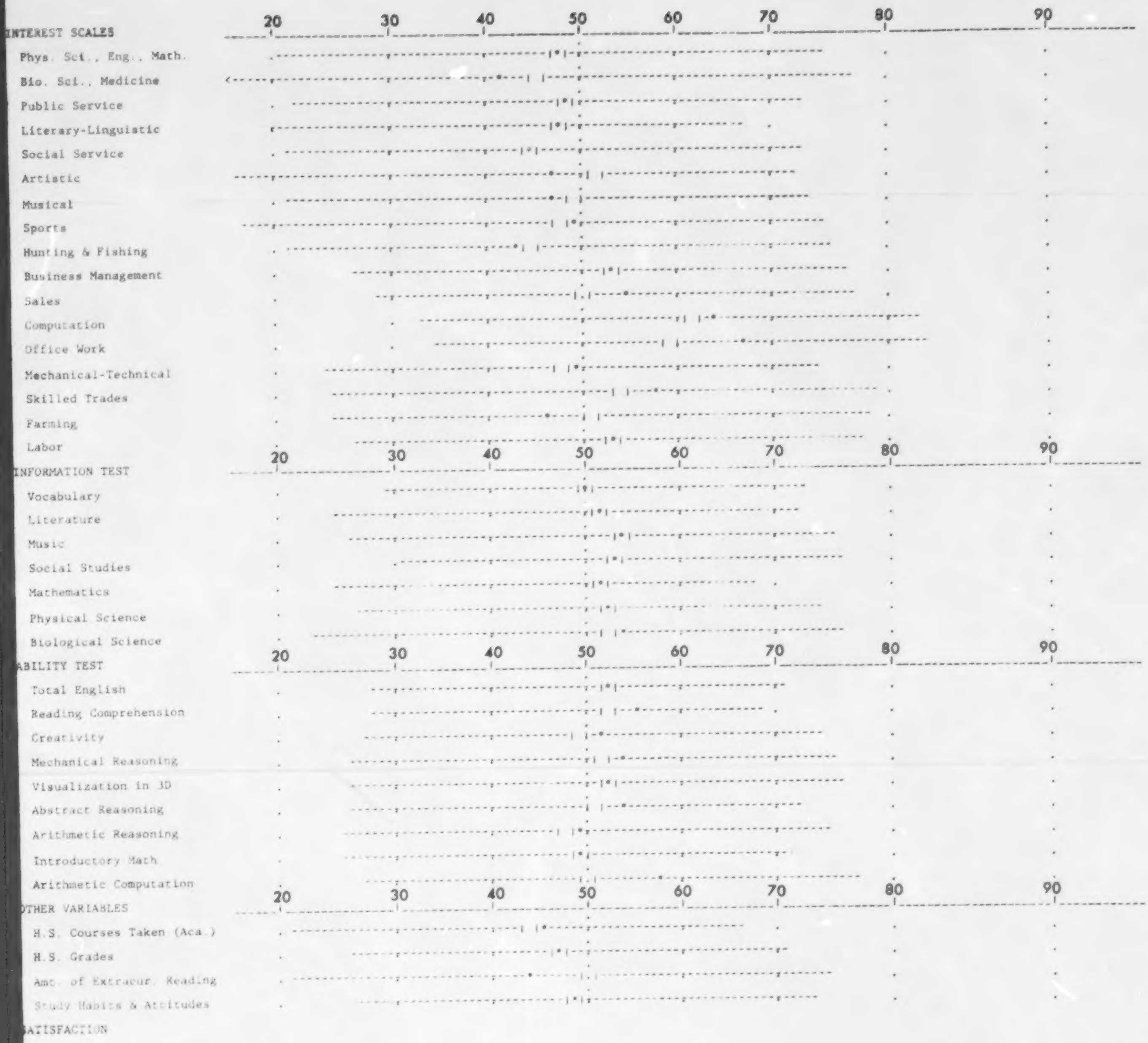
(* based on 68% of individuals in occupation)

CAREER GROUP 11

SECRETARIAL-CLERICAL, OFFICE WORKERS

ACCOUNTING/RECORDING WORKER

(n = 10 per 100C,



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Job Security
Friendliness of Co-workers

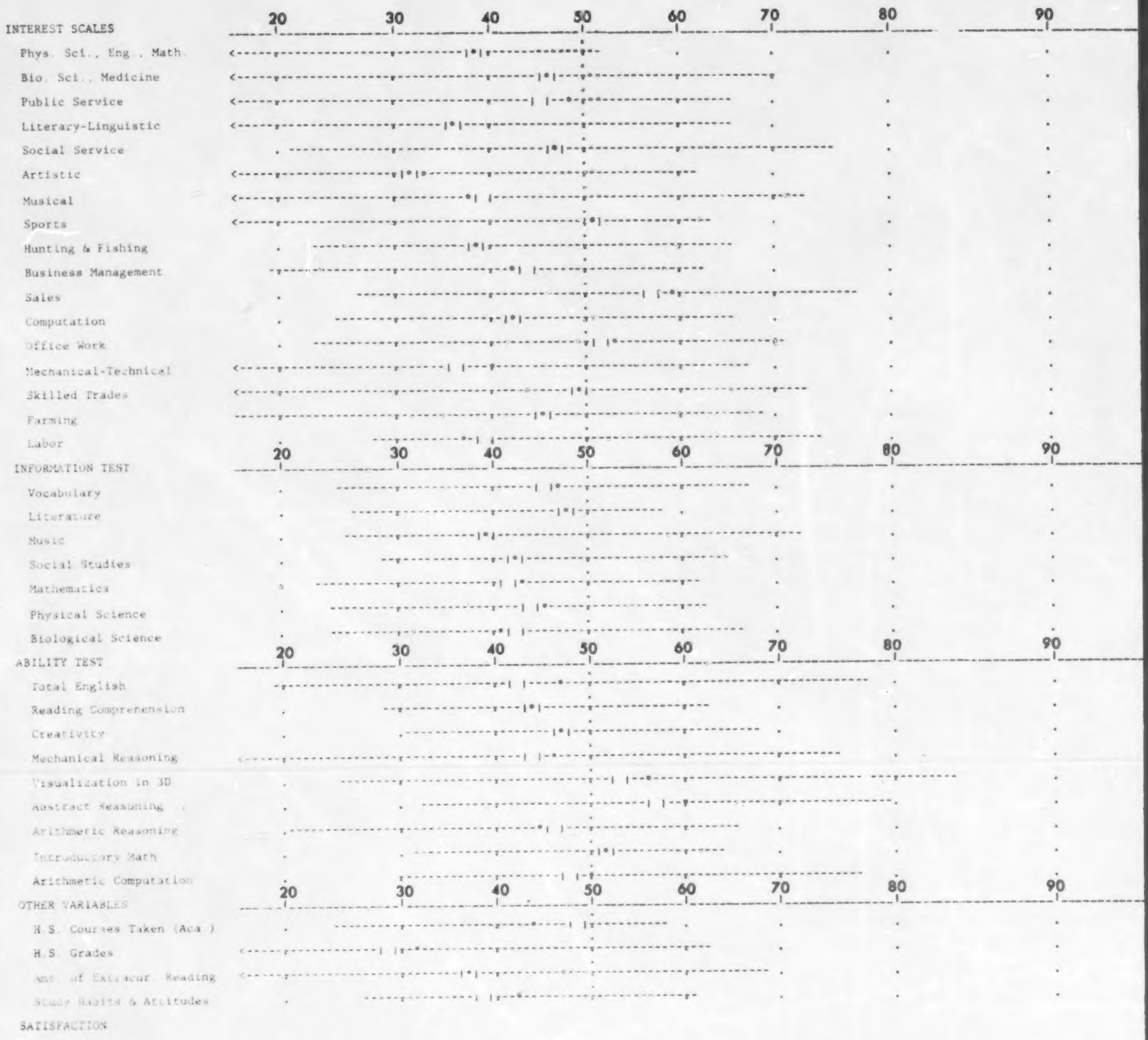
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 57% of individuals in occupation)

BANK CLERK/TELLER

(n = 5 per 1000)



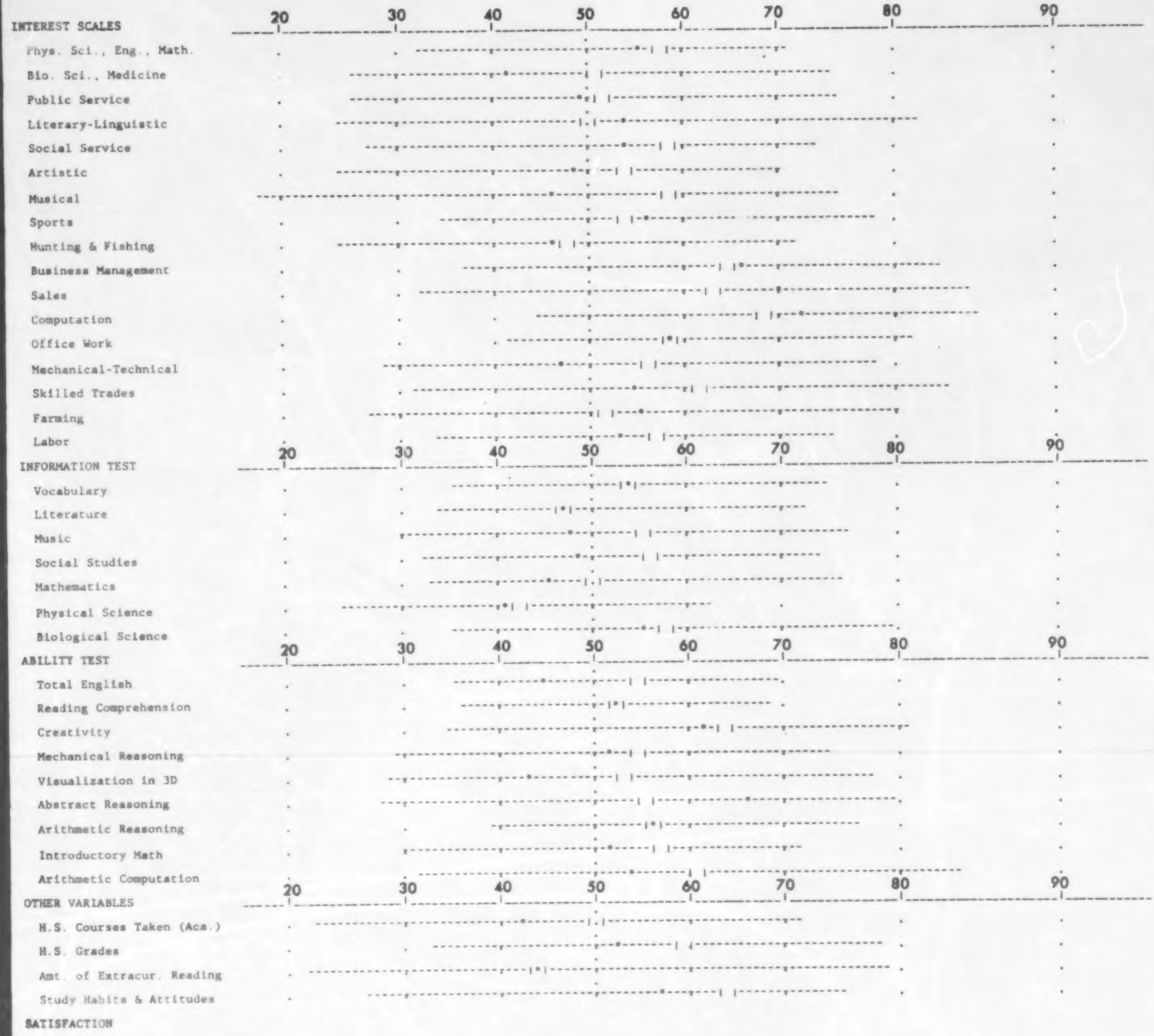
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Income to Start
Opportunity to Advance

(* based on 80% of individuals in occupation)

BOOKKEEPER

(n = 7 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

How Well I Can Do the Work
Friendliness of Co-workers
Quality of Surroundings

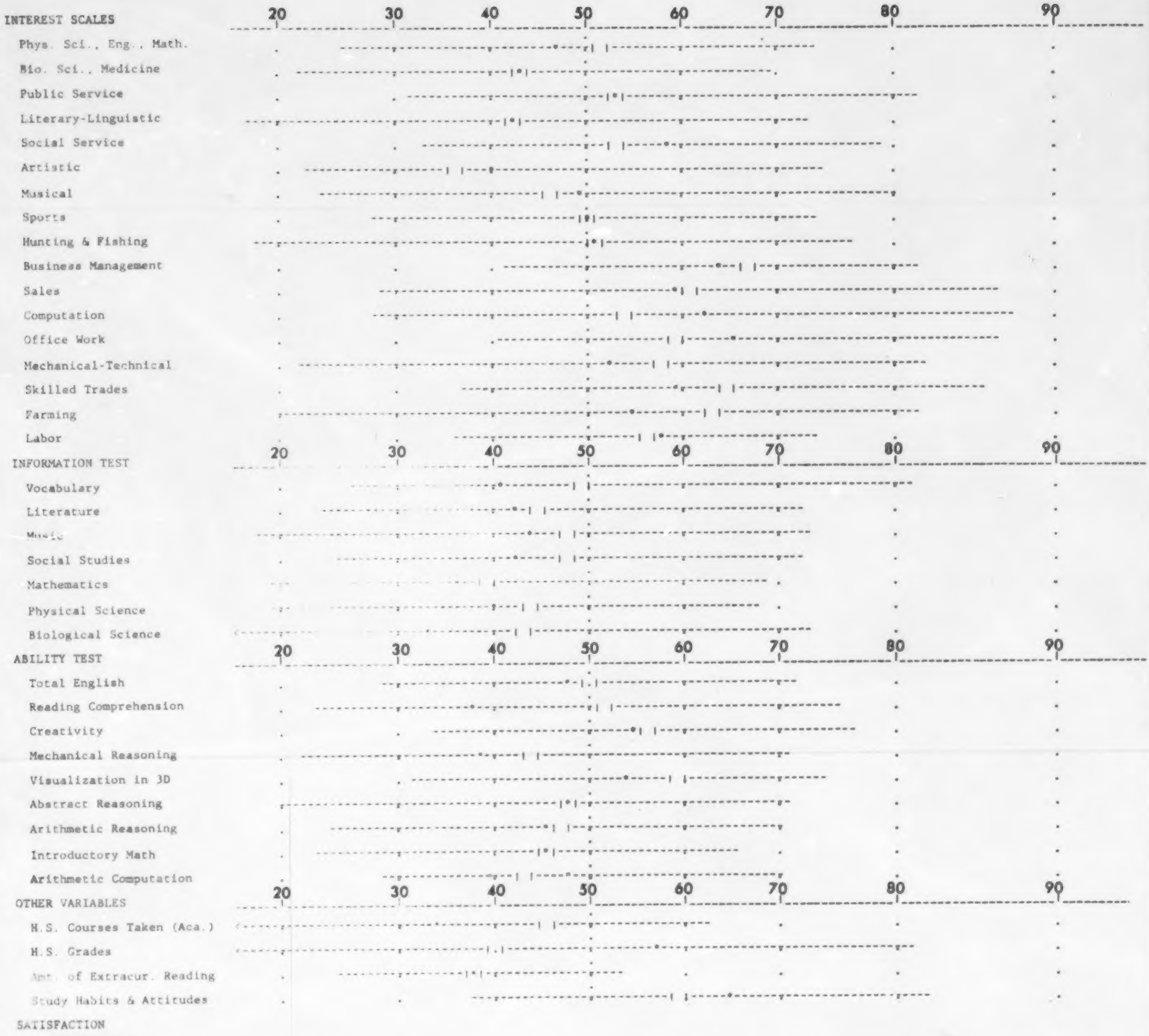
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 66% of individuals in occupation)

CASHIER

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Friendliness of Co-workers
Job Security
How Well I Can Do the Work

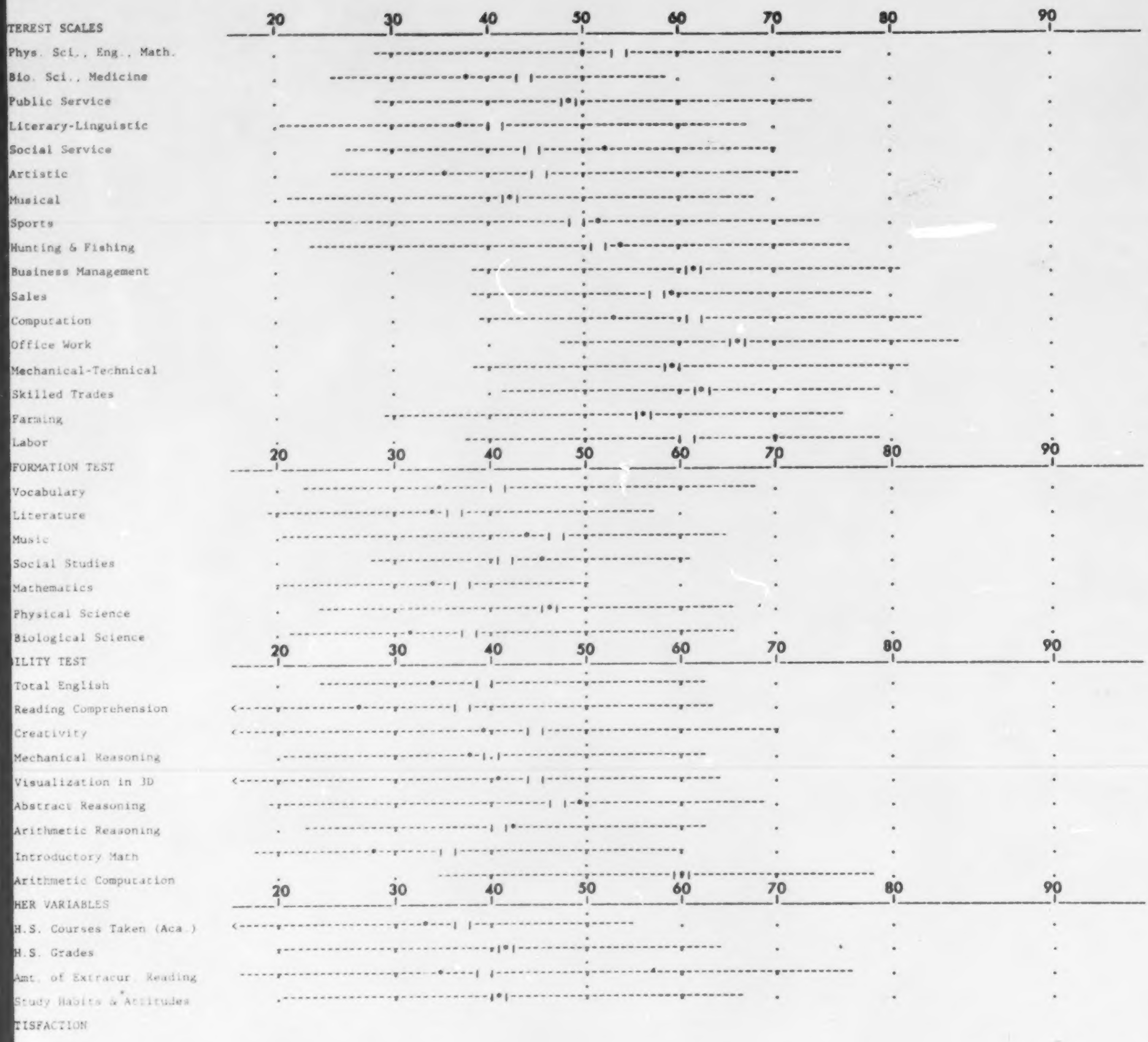
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Length of Work Week
Income to Start
Relationship of Work to Prior Training

(* based on 68% of individuals in occupation)

CLERK

(n = 5 per 1000)



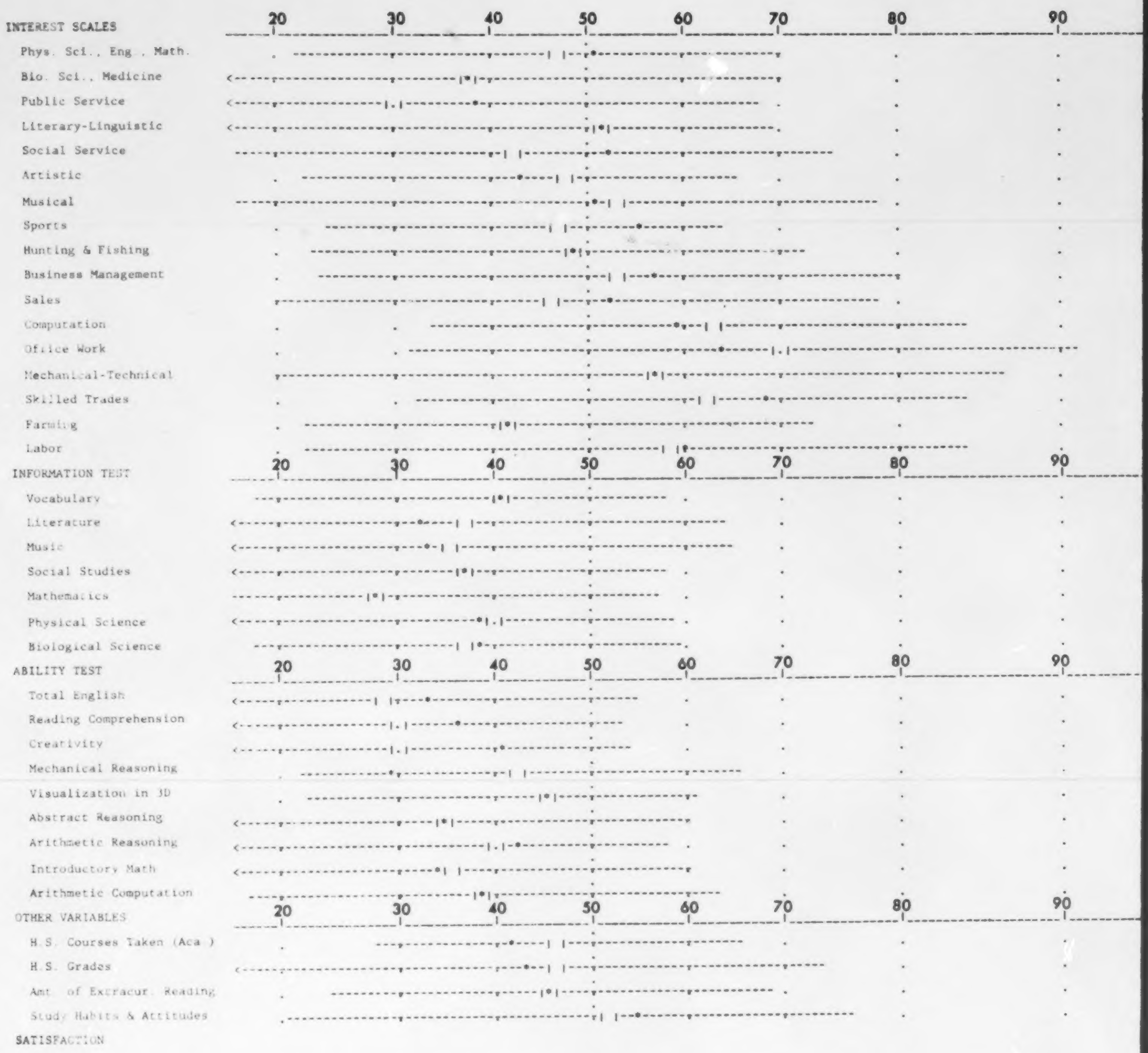
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
- Friendliness of Co-workers
- Interesting Work
- How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
- Opportunity to Advance
- Income to Start
- Length of Vacations

(* based on 57% of individuals in occupation)

KEYPUNCH OPERATOR

(n = 5 per 1000)



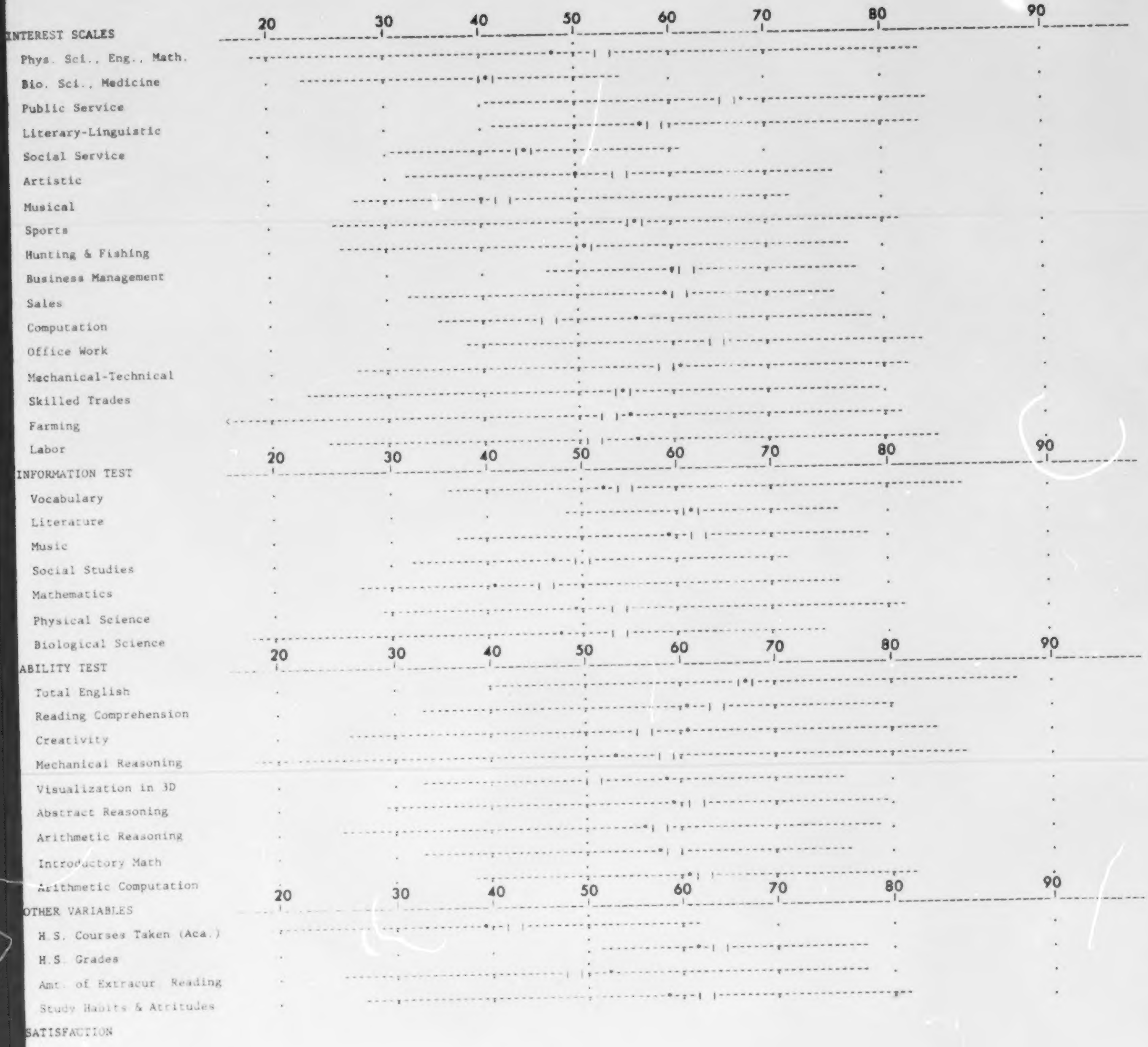
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Challenging Work
Length of Vacations

(* based on 48% of individuals in occupation)

LEGAL SECRETARY

(n = 2 per 1000)



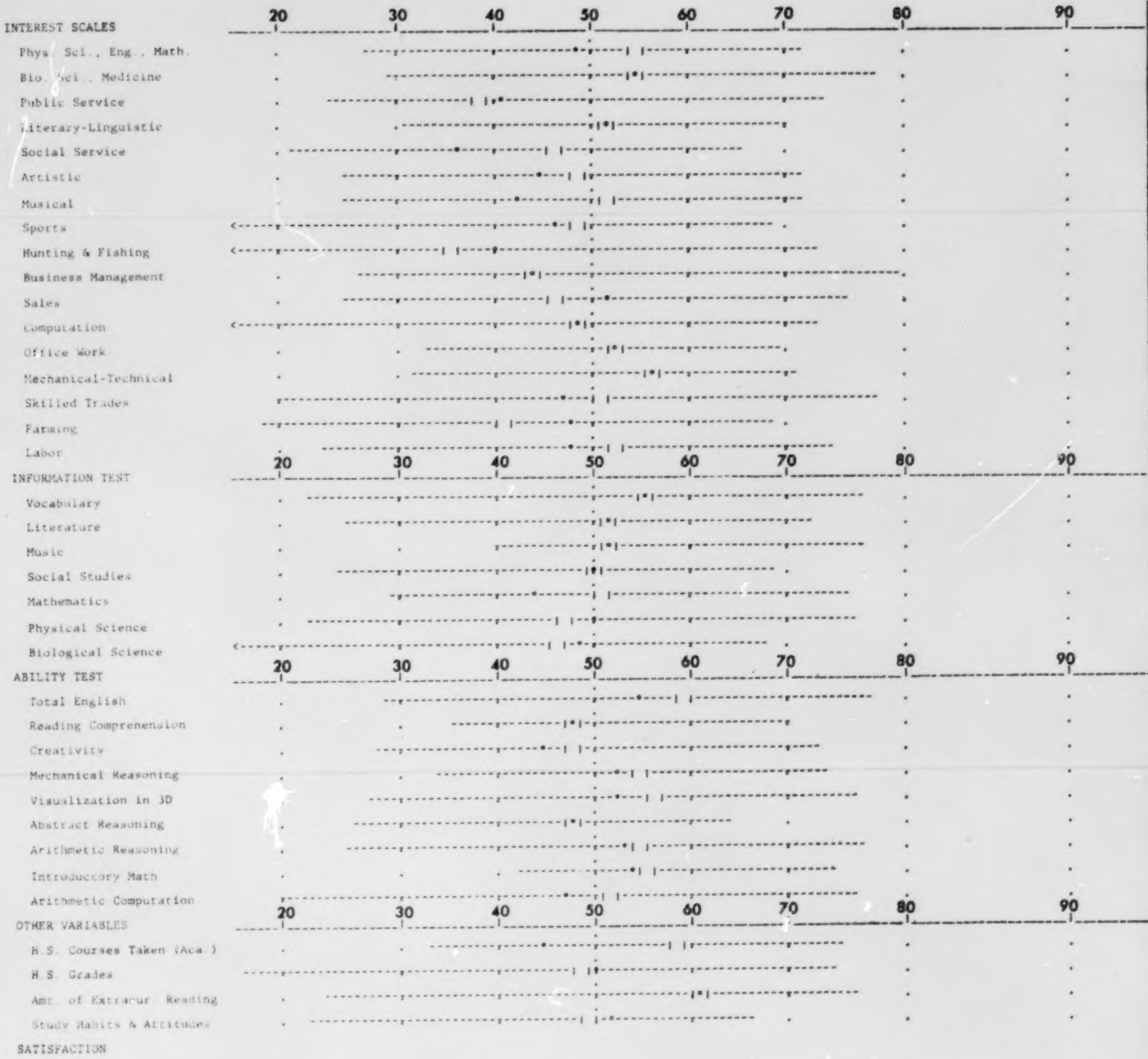
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Job Security
How Well I Can Do the Work
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Length of Vacations
Income to Start

(* based on 67% of individuals in occupation)

MEDICAL/DENTAL SECRETARY

(n = 2 per 1000)



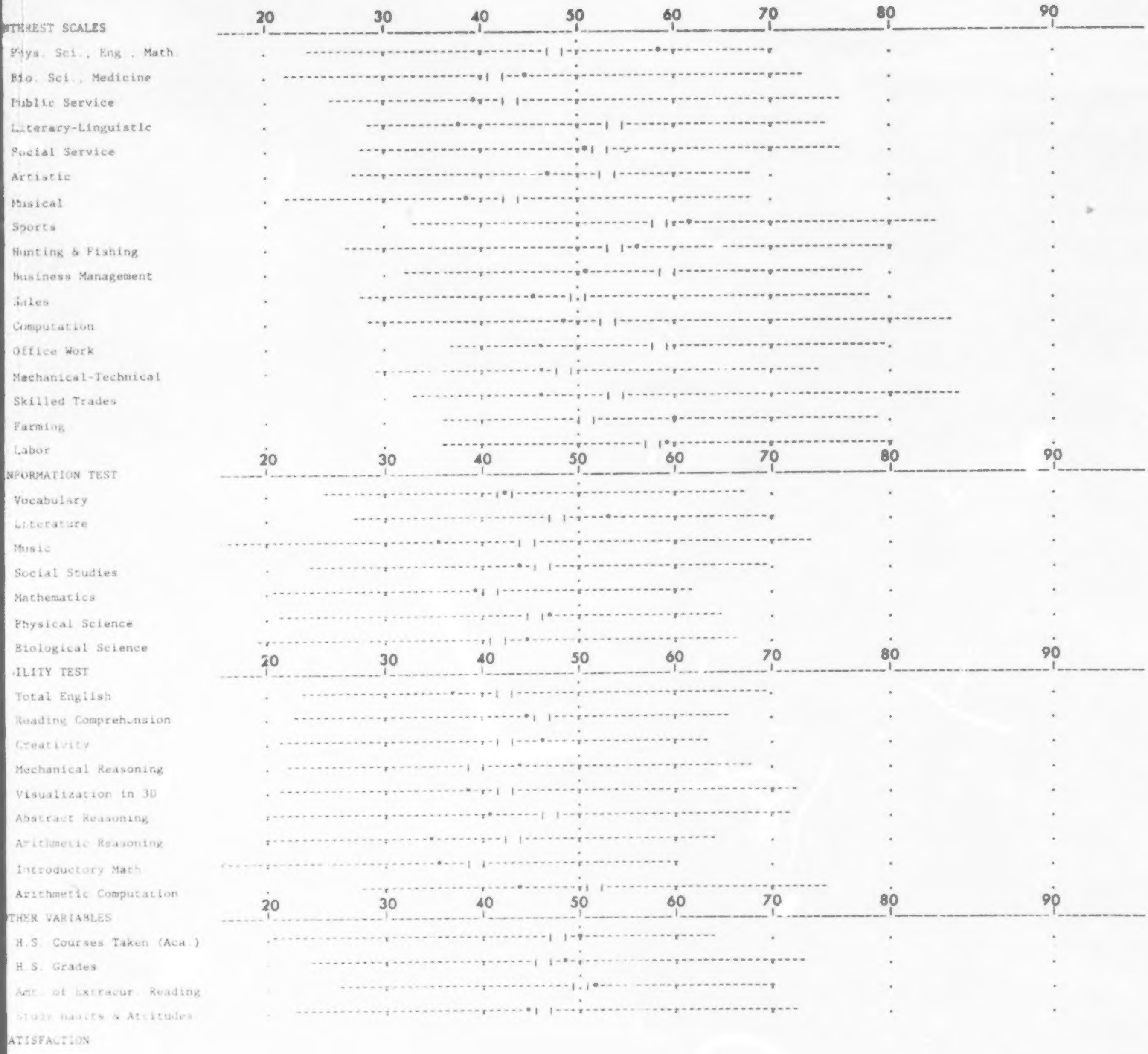
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Interesting Work
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Length of Vacations
Income to Start

(* based on 67% of individuals in occupation)

OFFICE MACHINE OPERATOR, SHIPPING/STOCK CLERK, MAIL CLERK

(n = 14 per 1000)

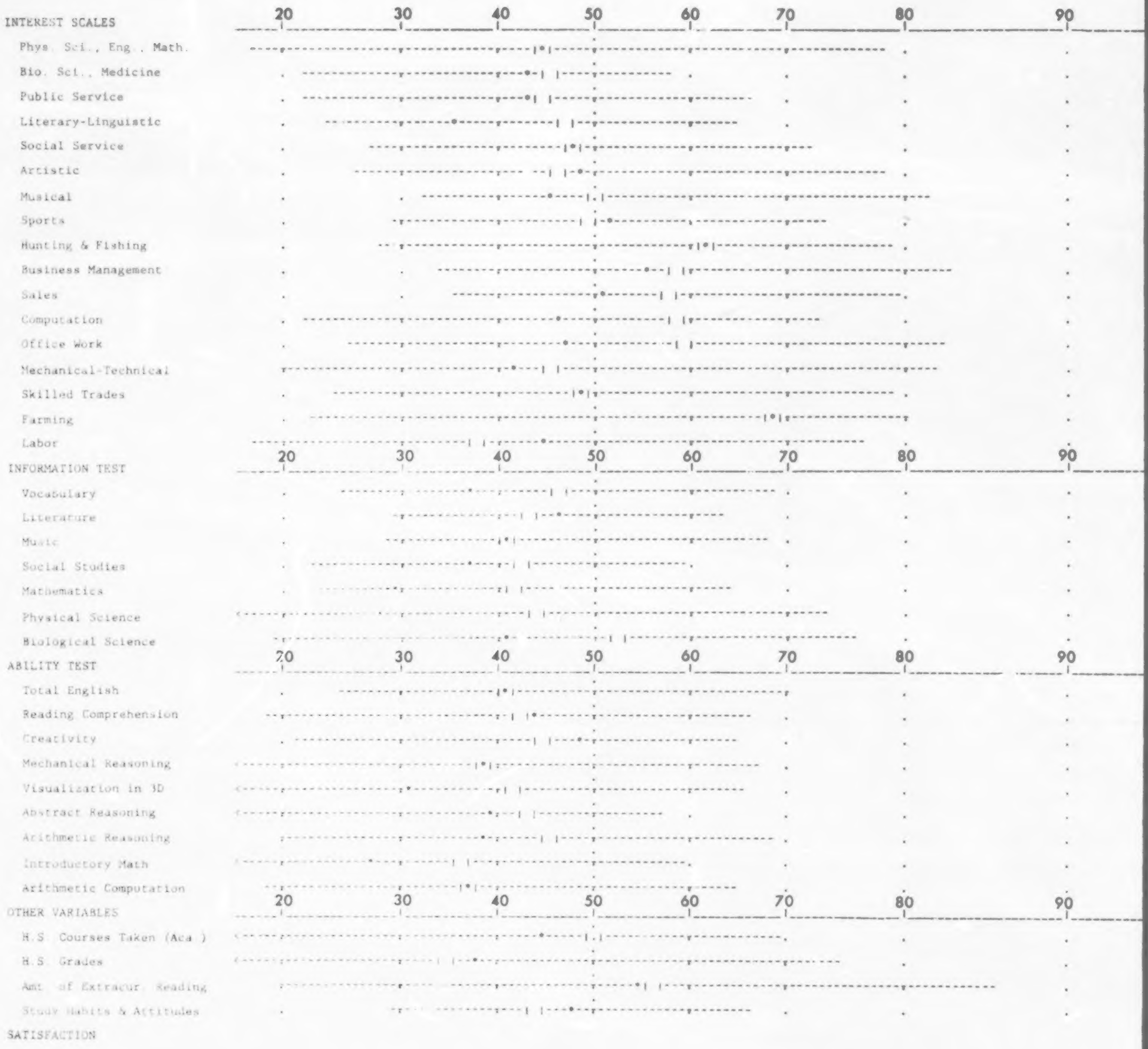


Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Friendliness of Co-workers

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Relationship of Work to Prior Training
Opportunity to Advance
Challenging Work

(* based on 82% of individuals in occupation)

"PUBLIC CONTACT" WORKER
(e.g., receptionist, hotel clerk, ticket clerk)
(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Friendliness of Co-workers
Interesting Work
Quality of Surroundings

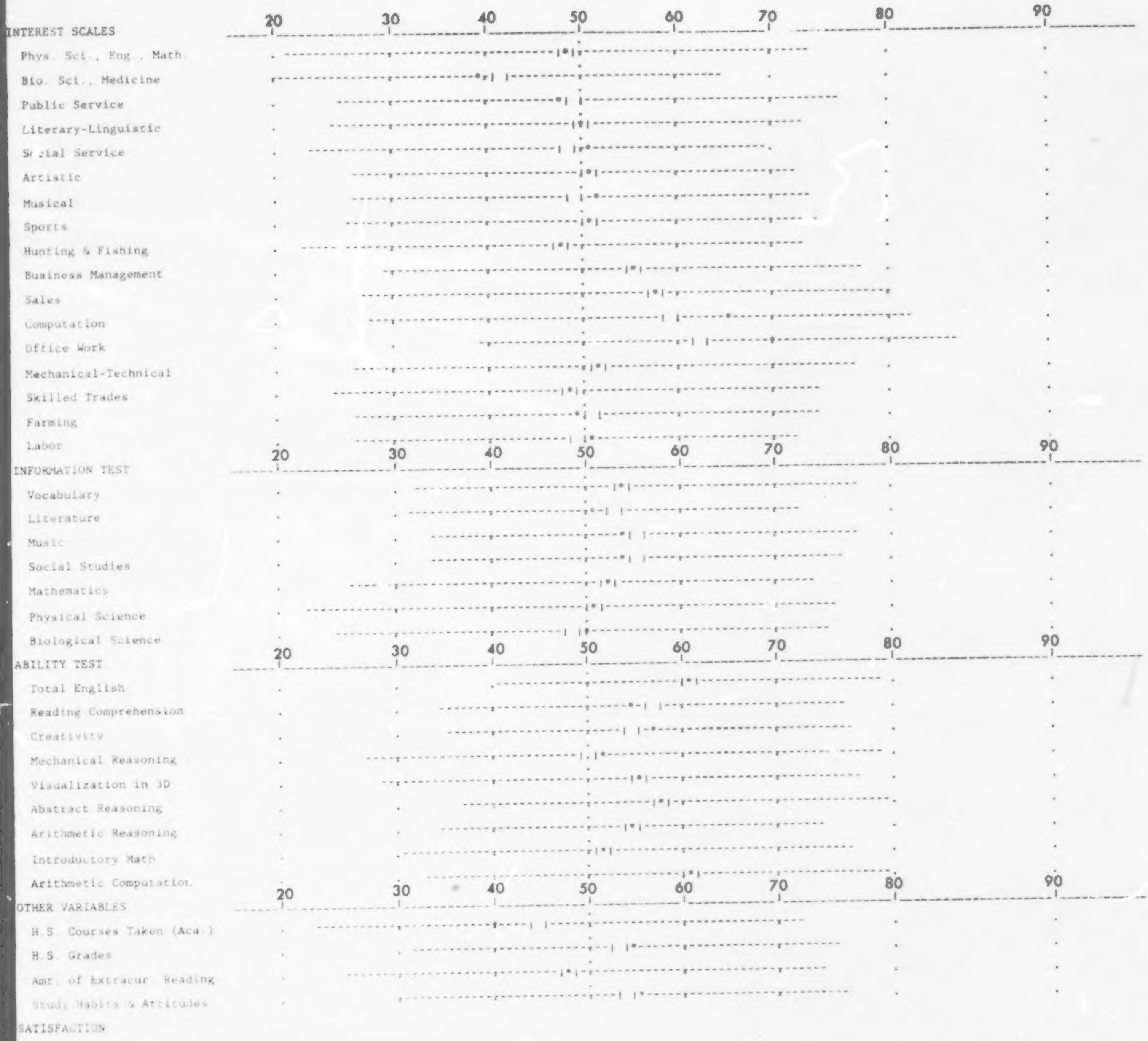
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfyin

Opportunity to Advance
Relationship of Work to Prior Training
Income to Start

(* based on 52% of individuals in occupation)

SECRETARY

(n = 24 per 1000)



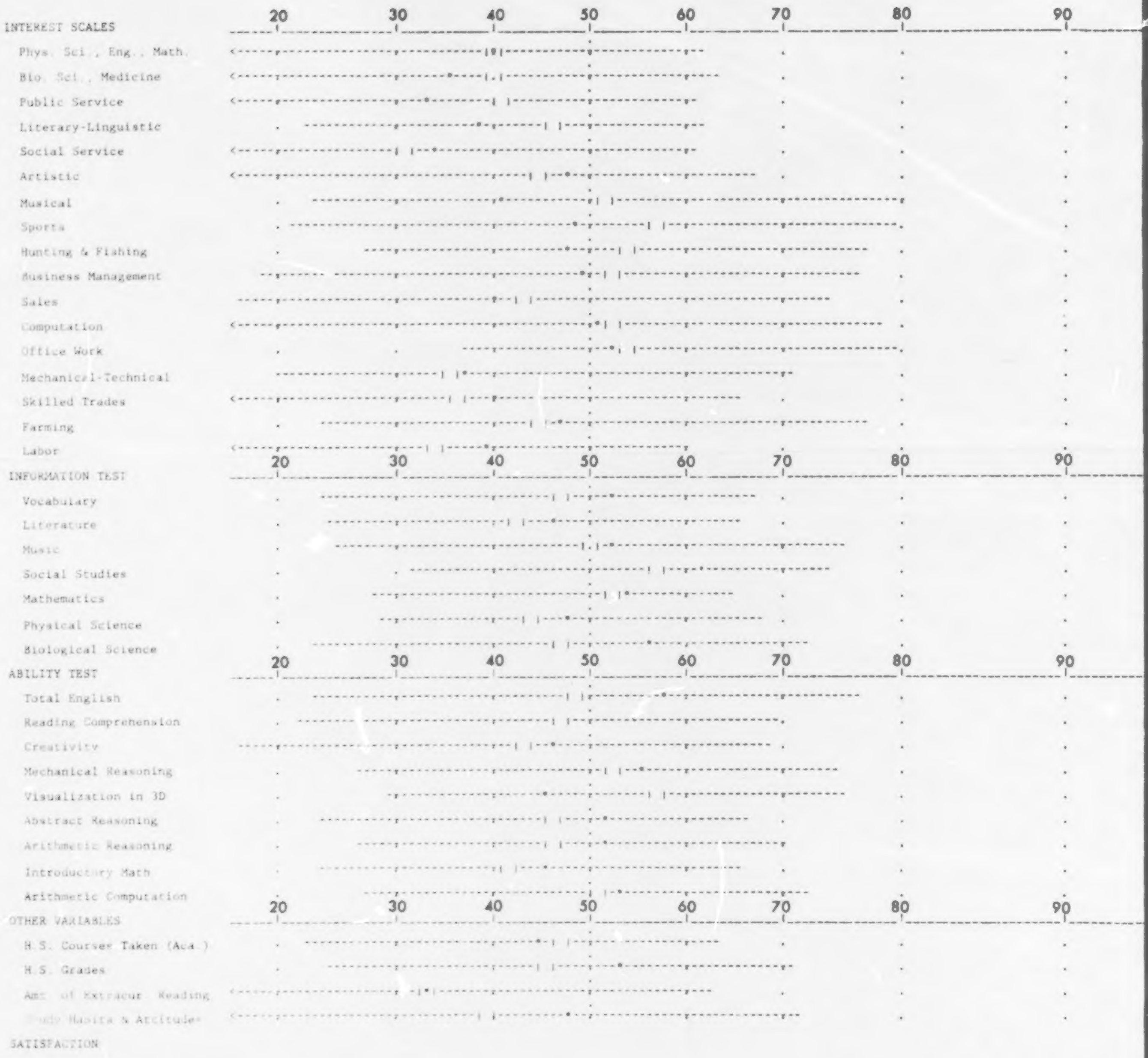
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 65% of individuals in occupation)

SECRETARY-BOOKKEEPER

(n = 2 per 1000)



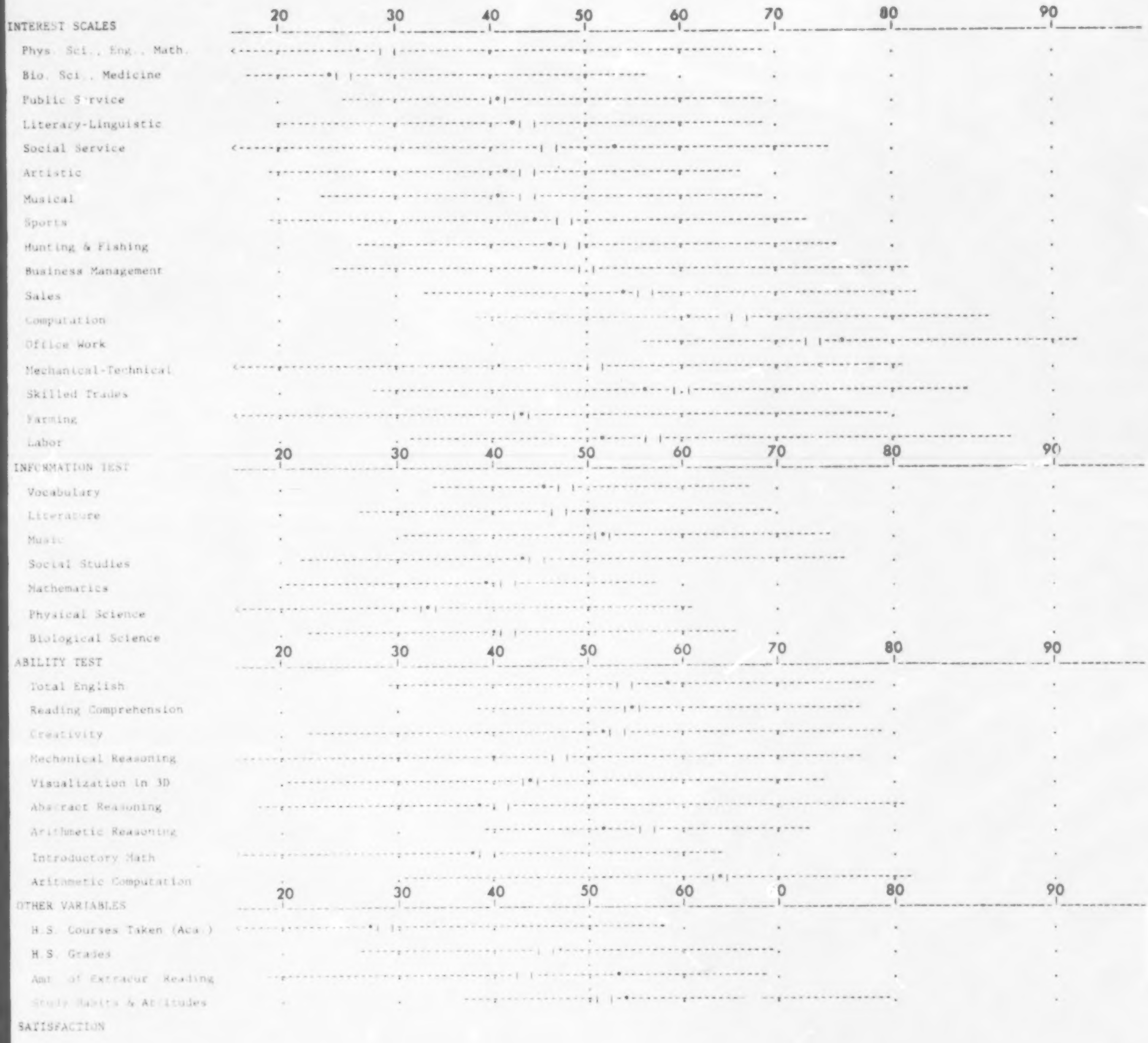
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Income Expected

(* based on 57% of individuals in occupation)

STENOGRAPHER

(n = 2 per 1000)



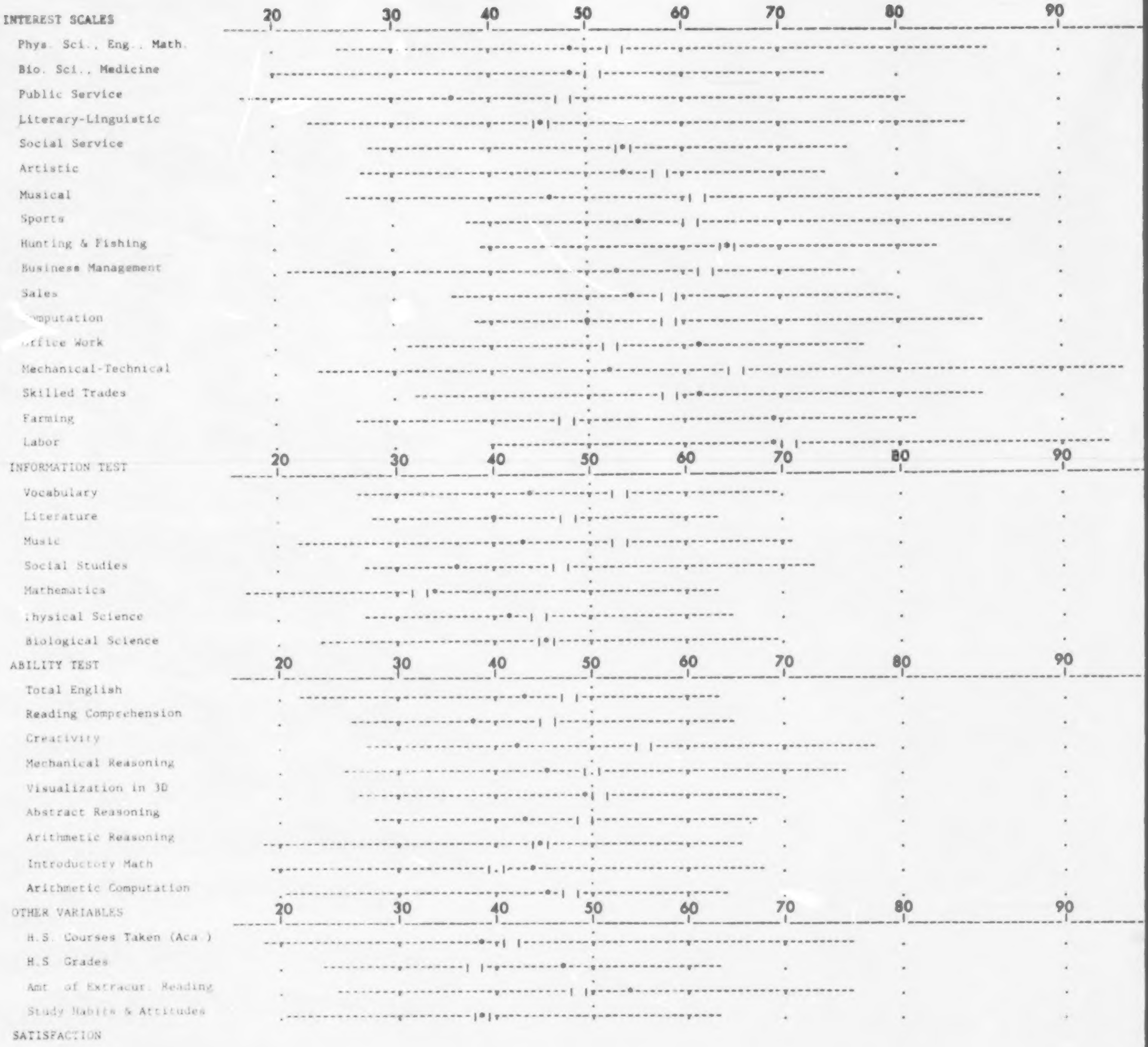
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Relationship of Work to Prior Training

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Income to Start
Quality of Surroundings

(* based on 78% of individuals in occupation)

TELEPHONE OPERATOR

(n = 2 per 1000)



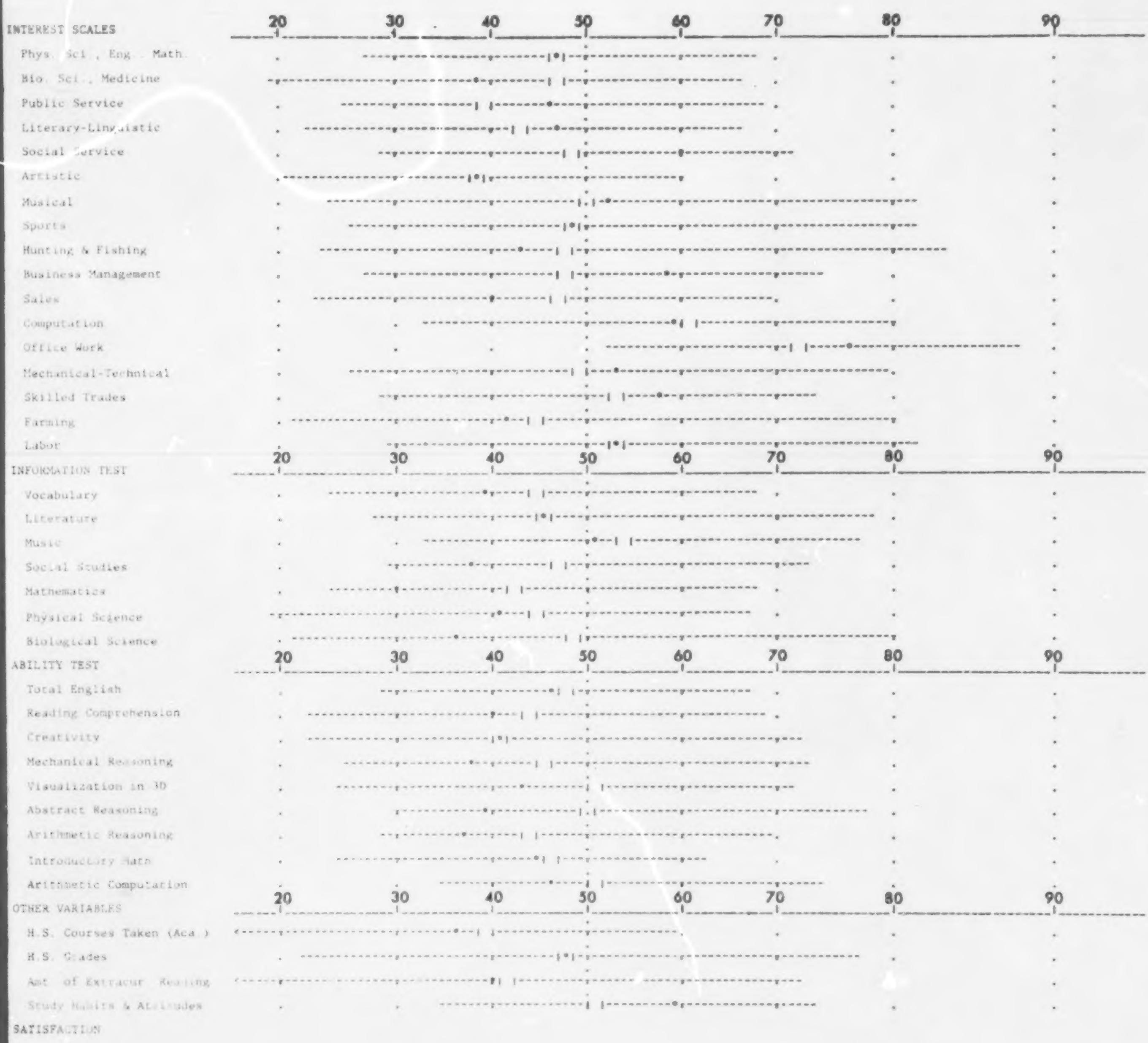
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Interesting Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Challenging Work
Length of Vacations

(* based on 51% of individuals in occupation)

TYPIST, CLERK-TYPIST

(n = 6 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Length of Work Week
Income Expected

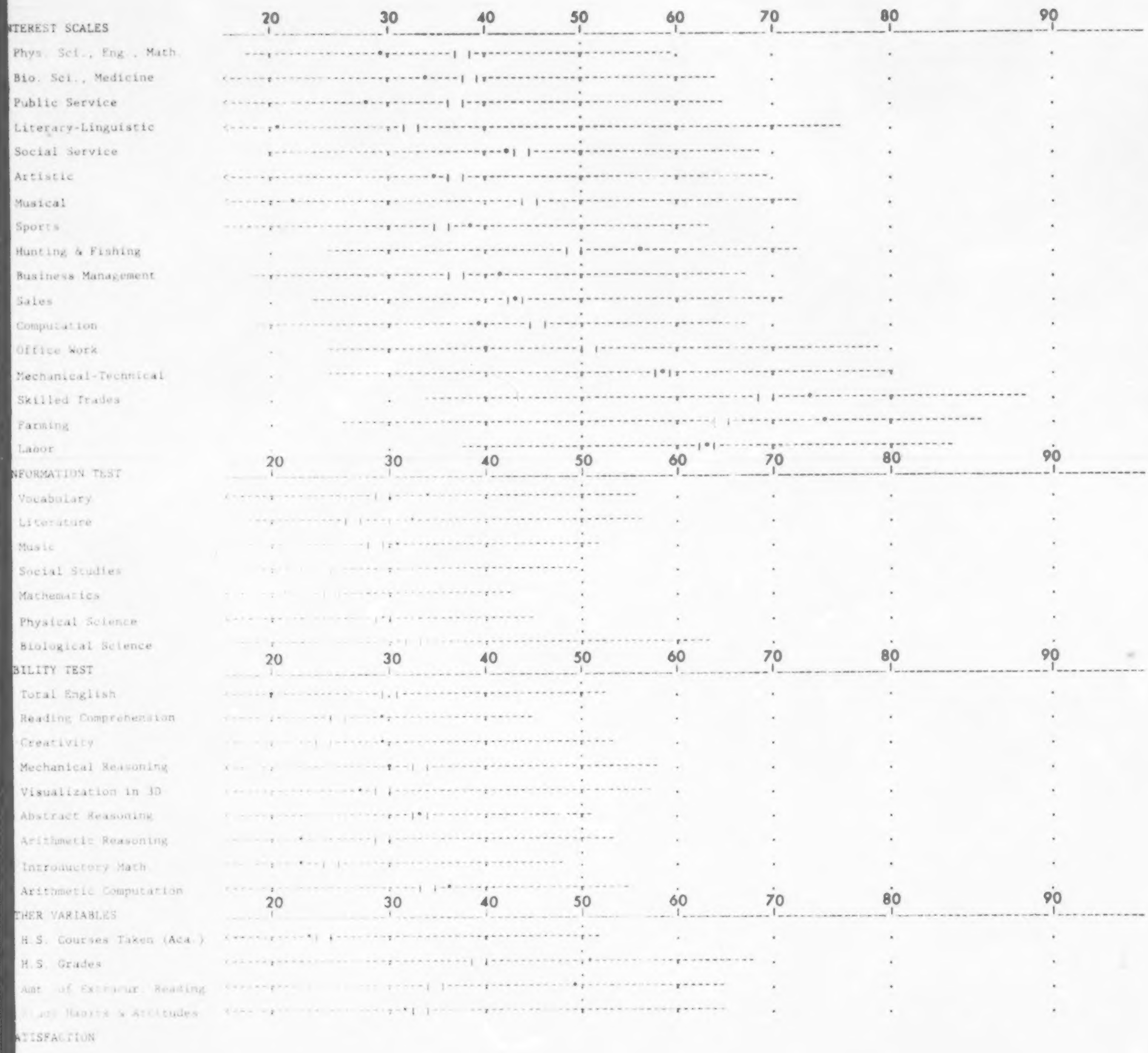
(* based on 56% of individuals in occupation)

CAREER GROUP 12

GENERAL LABOR, COMMUNITY AND PUBLIC SERVICE

AUTO/BUS/TRUCK DRIVER

(n = 14 per 1000)



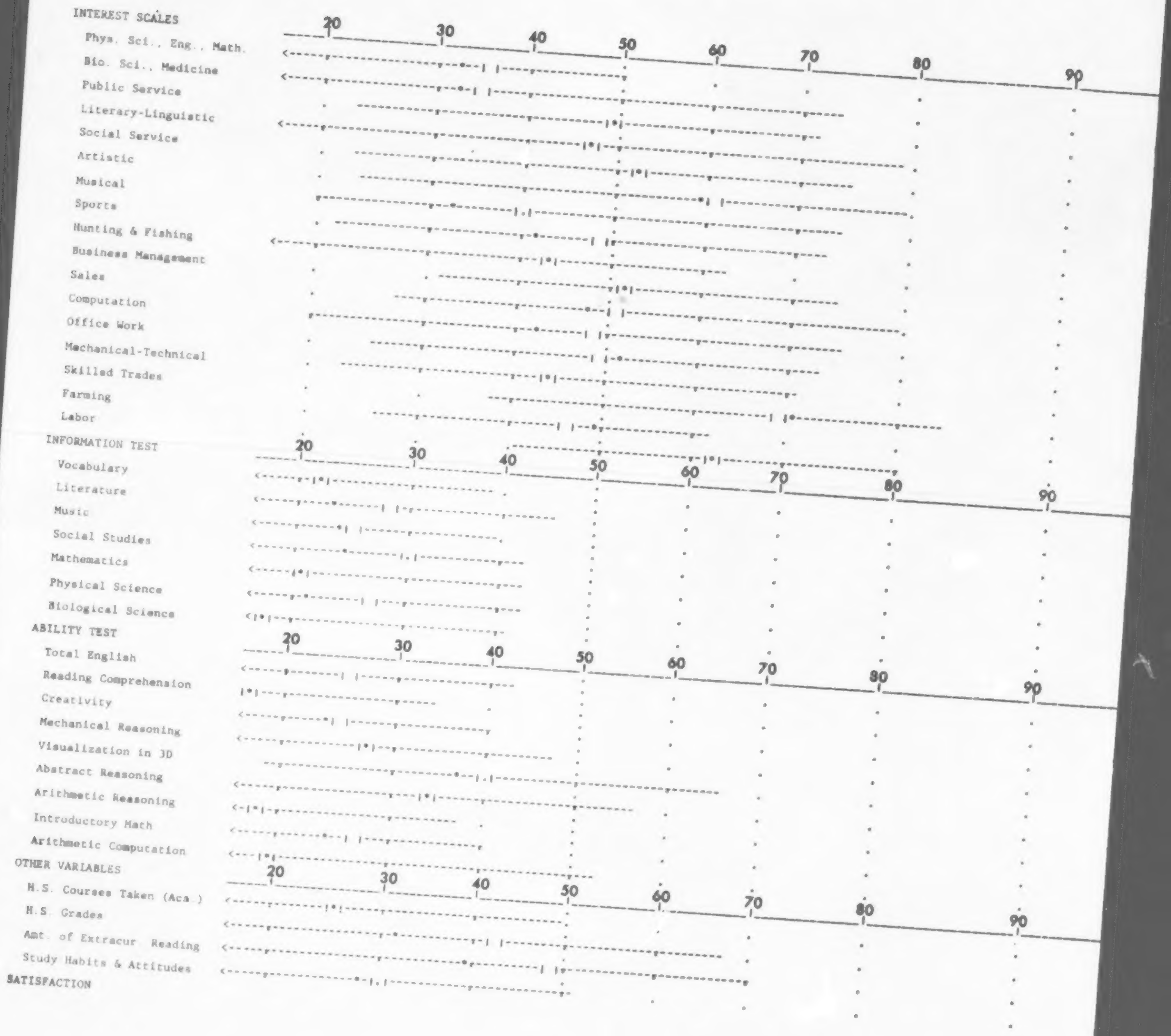
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Friendliness of Co-workers
Income to Start

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Length of Work Week
Challenging Work

(* based on 42% of individuals in occupation)

BARBER

(n = 1 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Relationship of Work to Prior Training
How Well I Can Do the Work
Quality of Surroundings

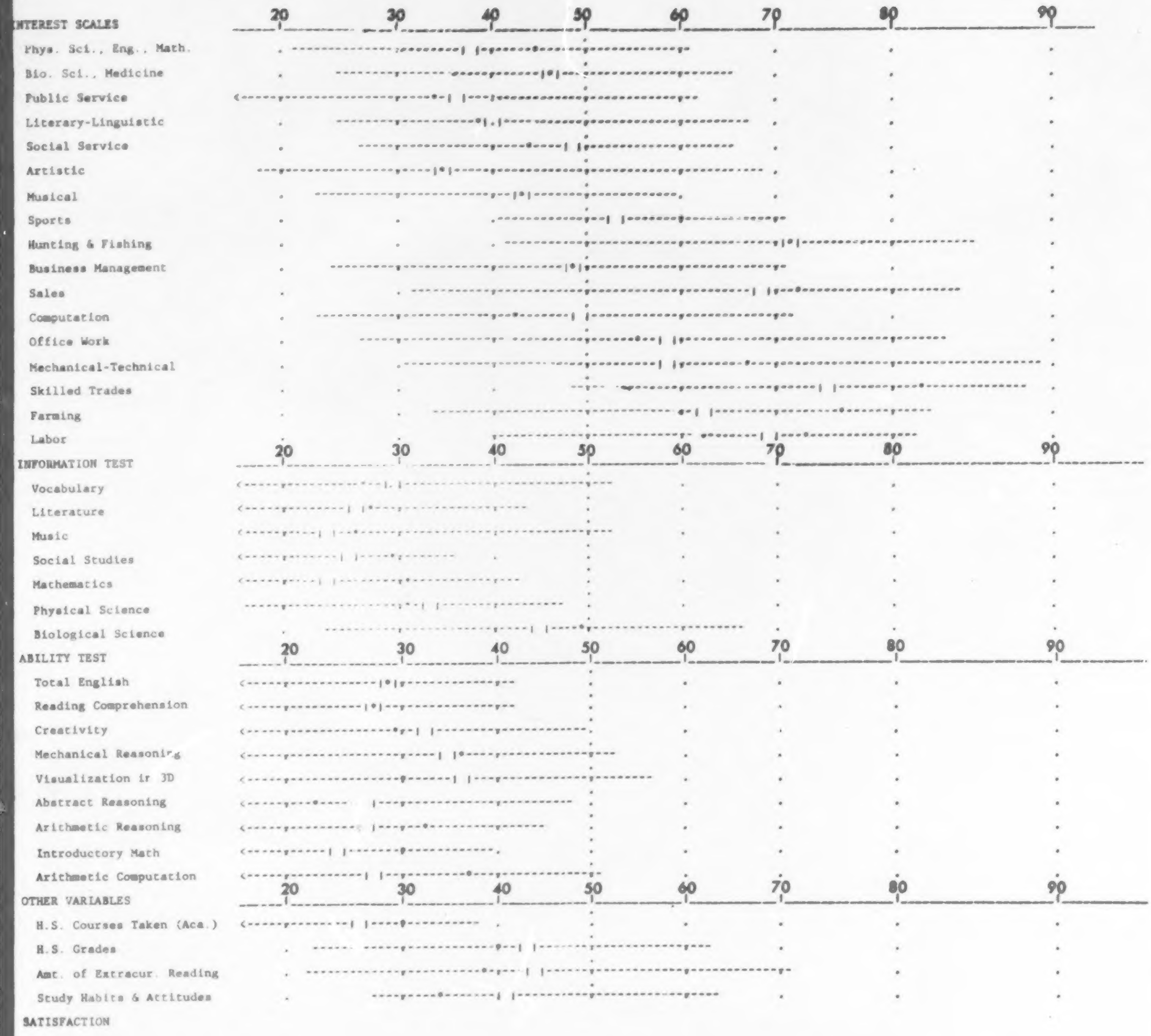
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 58% of individuals in occupation)

BUTCHER, MEAT-CUTTER

(n = 2 per 1000)



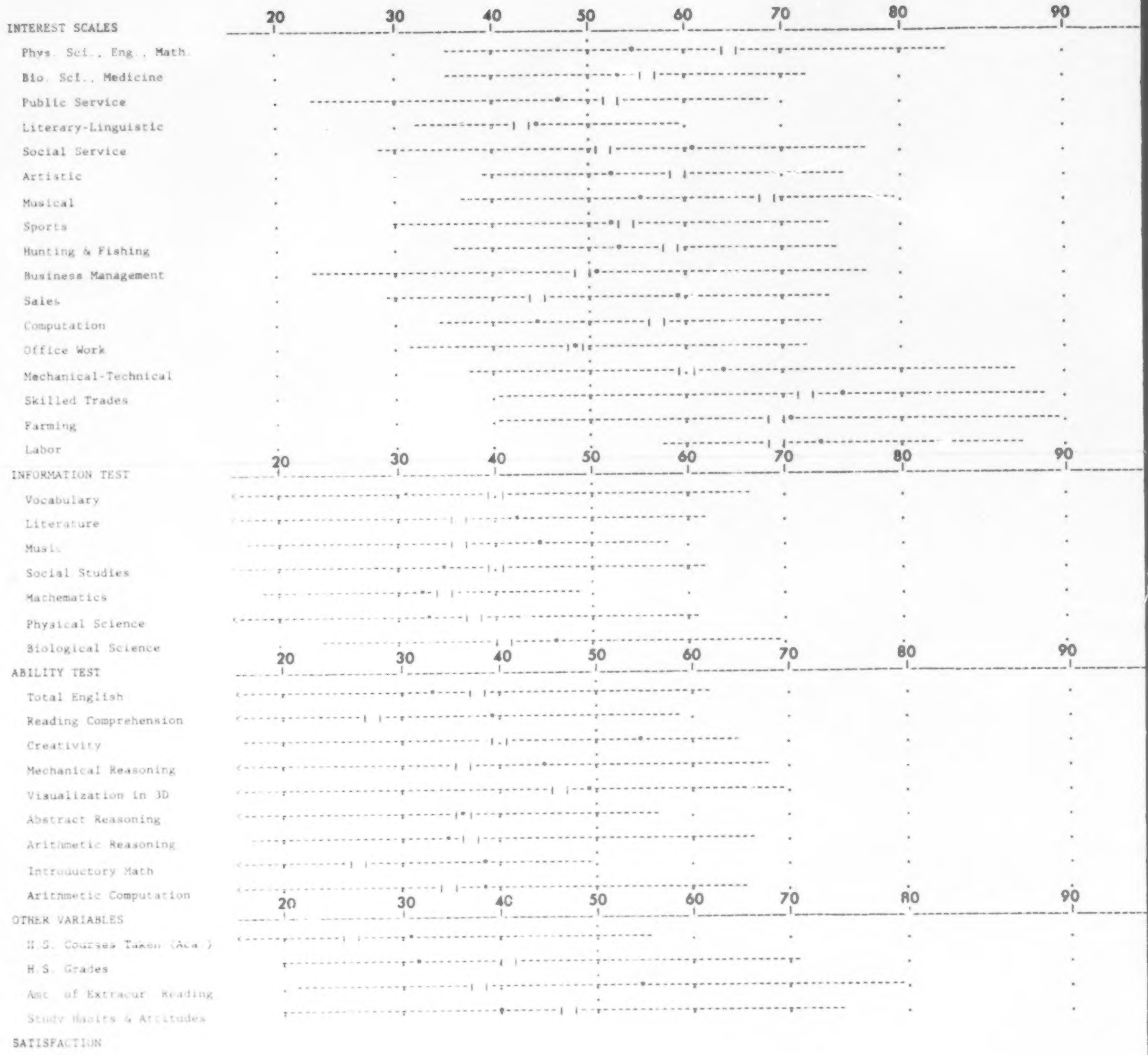
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Job Security
Income Expected

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Vacations
Opportunity to Advance
Quality of Surroundings

(* based on 56% of individuals in occupation)

DOMESTIC SERVICES WORKER

(n = 2 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Quality of Surroundings
How Well I Can Do the Work
Friendliness of Co-workers

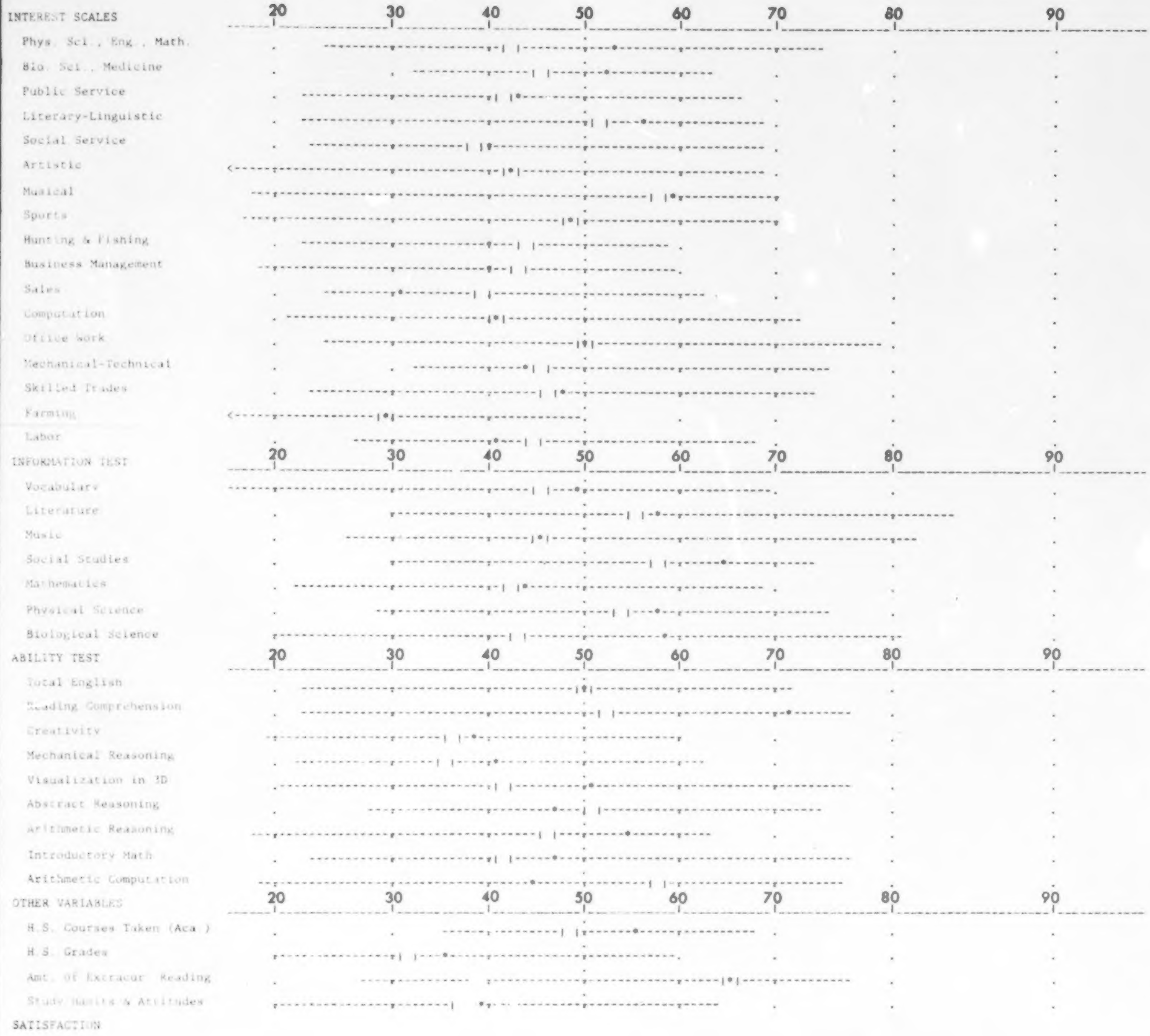
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Income Expected
Relationship of Work to Prior Training
Job Security

(* based on 42% of individuals in occupation)

ENLISTED PERSON: U. S. AIR FORCE, ARMY, NAVY, MARINES, COAST GUARD

(n = 1 per 1000)



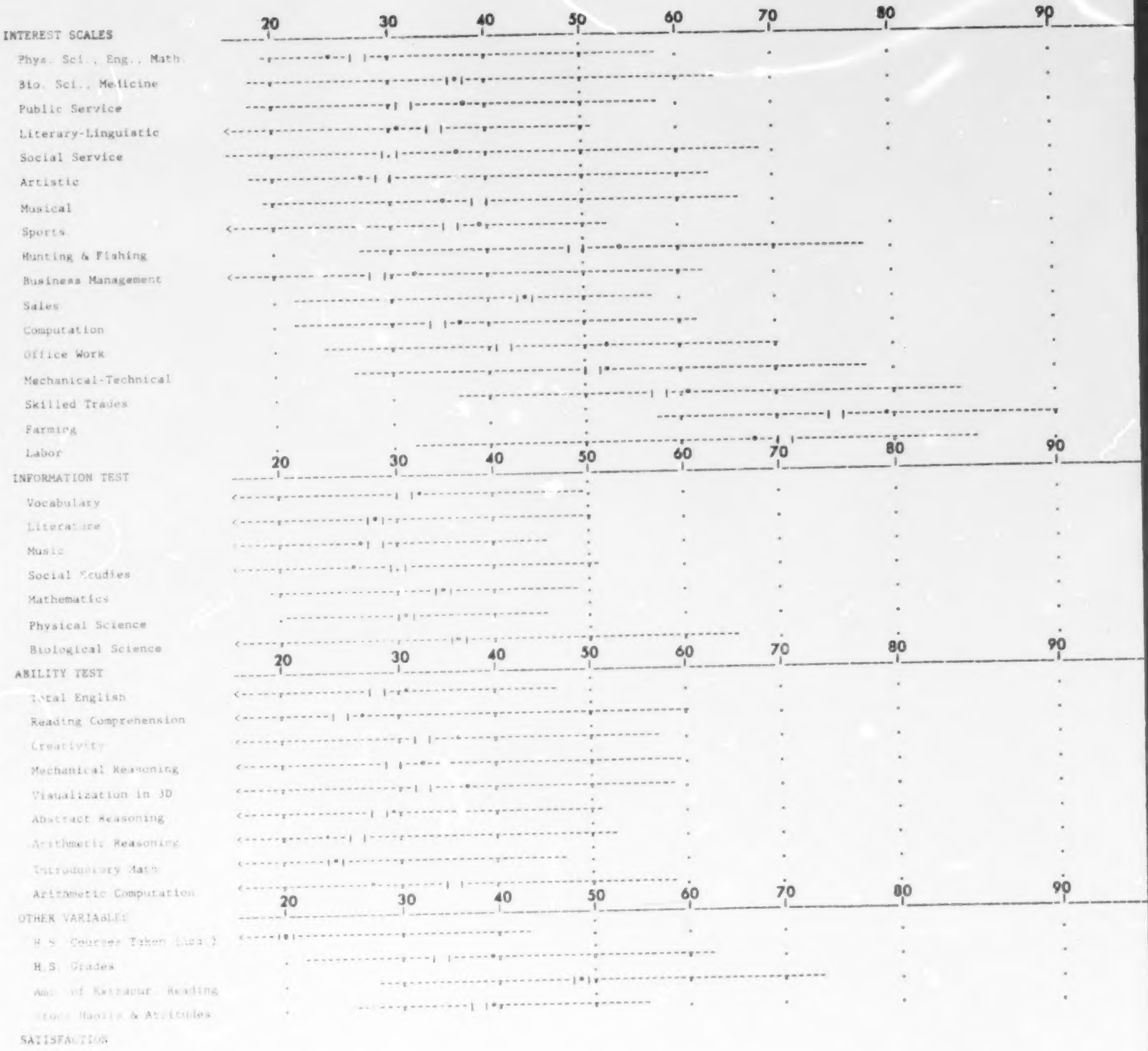
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Job Security
Importance of Work
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Income Expected
Relationship of Work to Prior Training

(* based on 73% of individuals in occupation)

FARM/RANCH WORKER

(n = 3 per 1000)



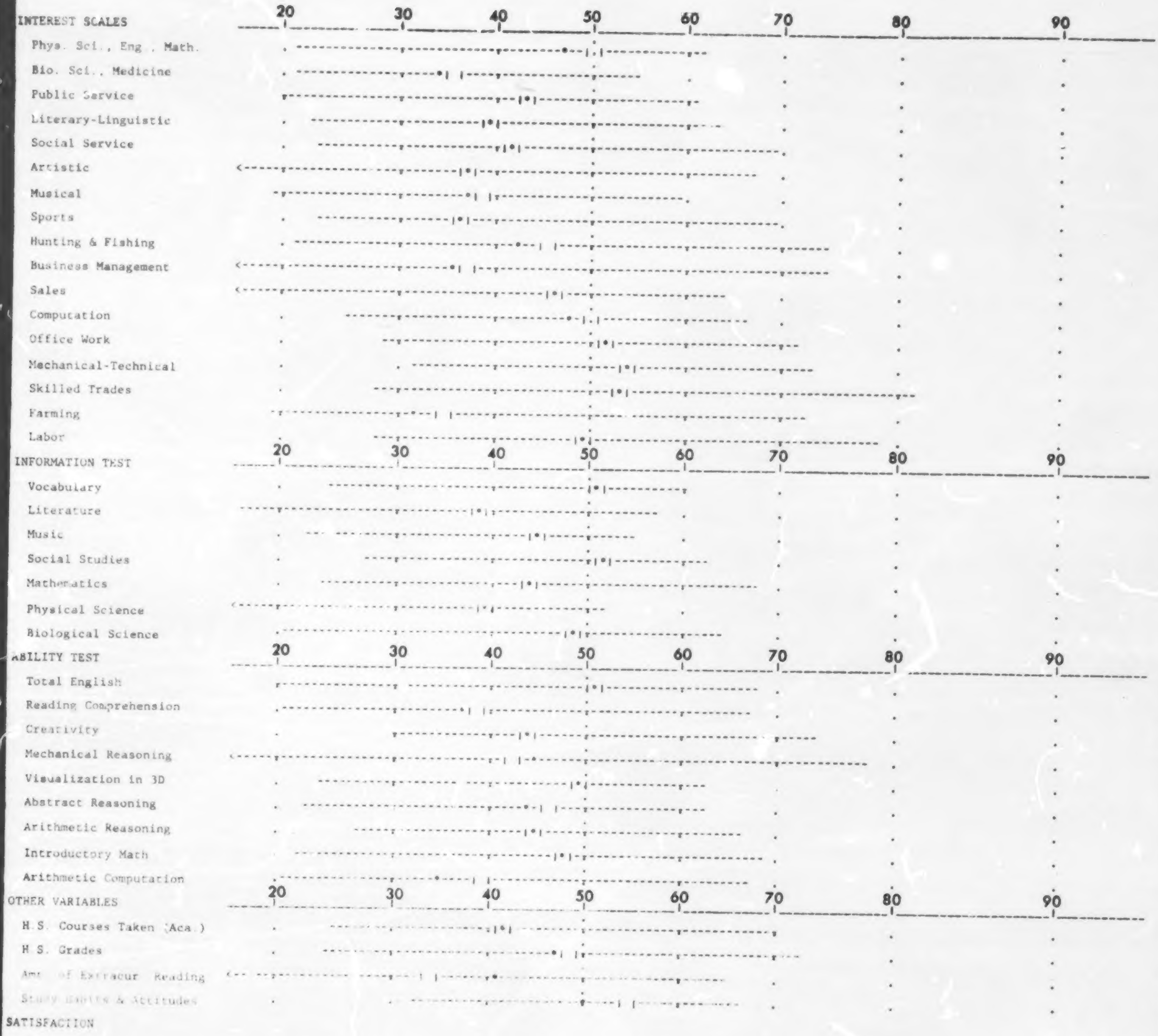
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Quality of Surroundings
Challenging Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Income to Start
Opportunity to Advance
Income Expected

(* based on 62% of individuals in occupation)

FIREFIGHTER

(n = 4 per 1000)



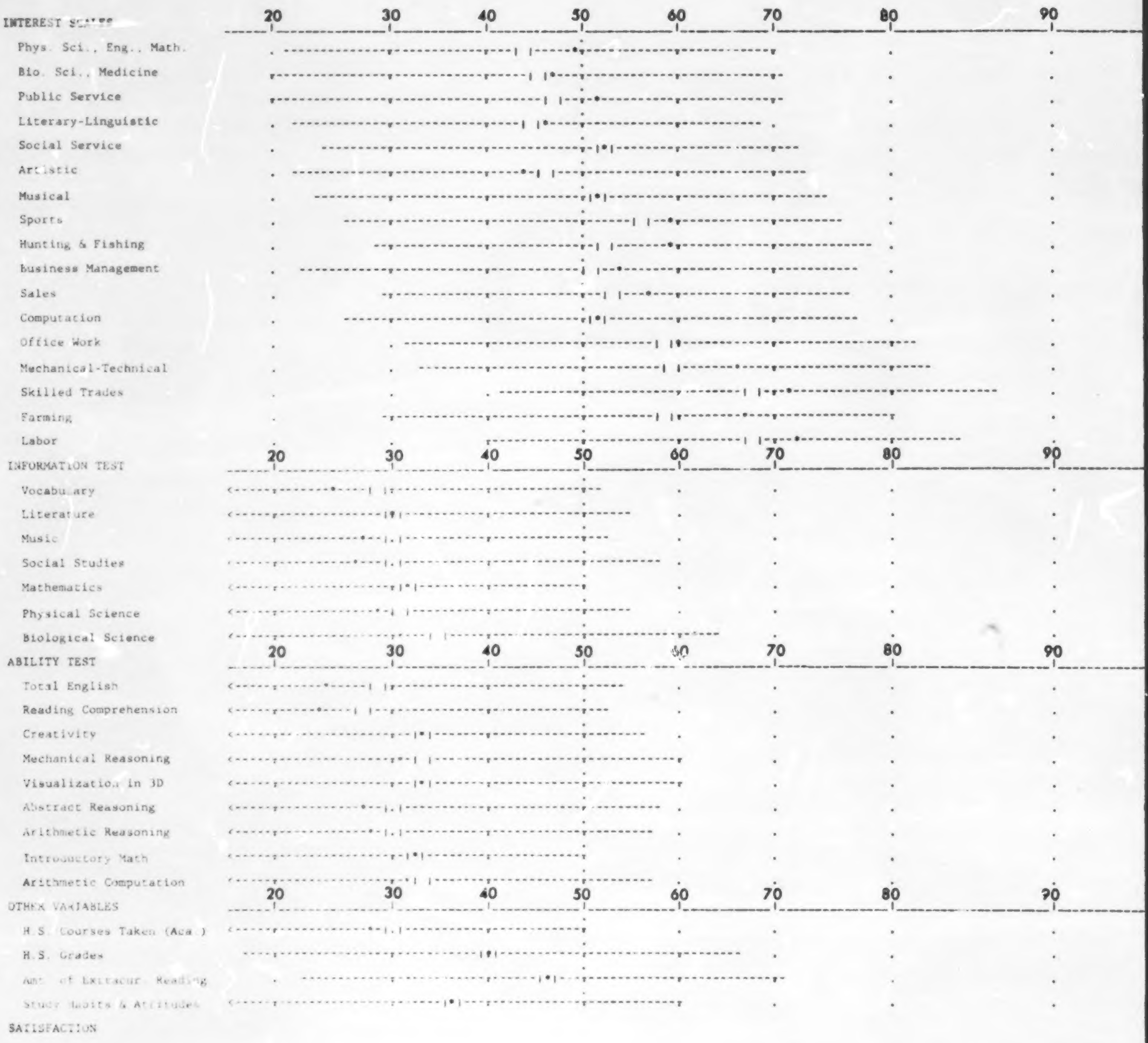
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
Interesting Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Work Week
Status
Quality of Surroundings

(* based on 92% of individuals in occupation)

GENERAL LABORER

(n = 50 per 1000)



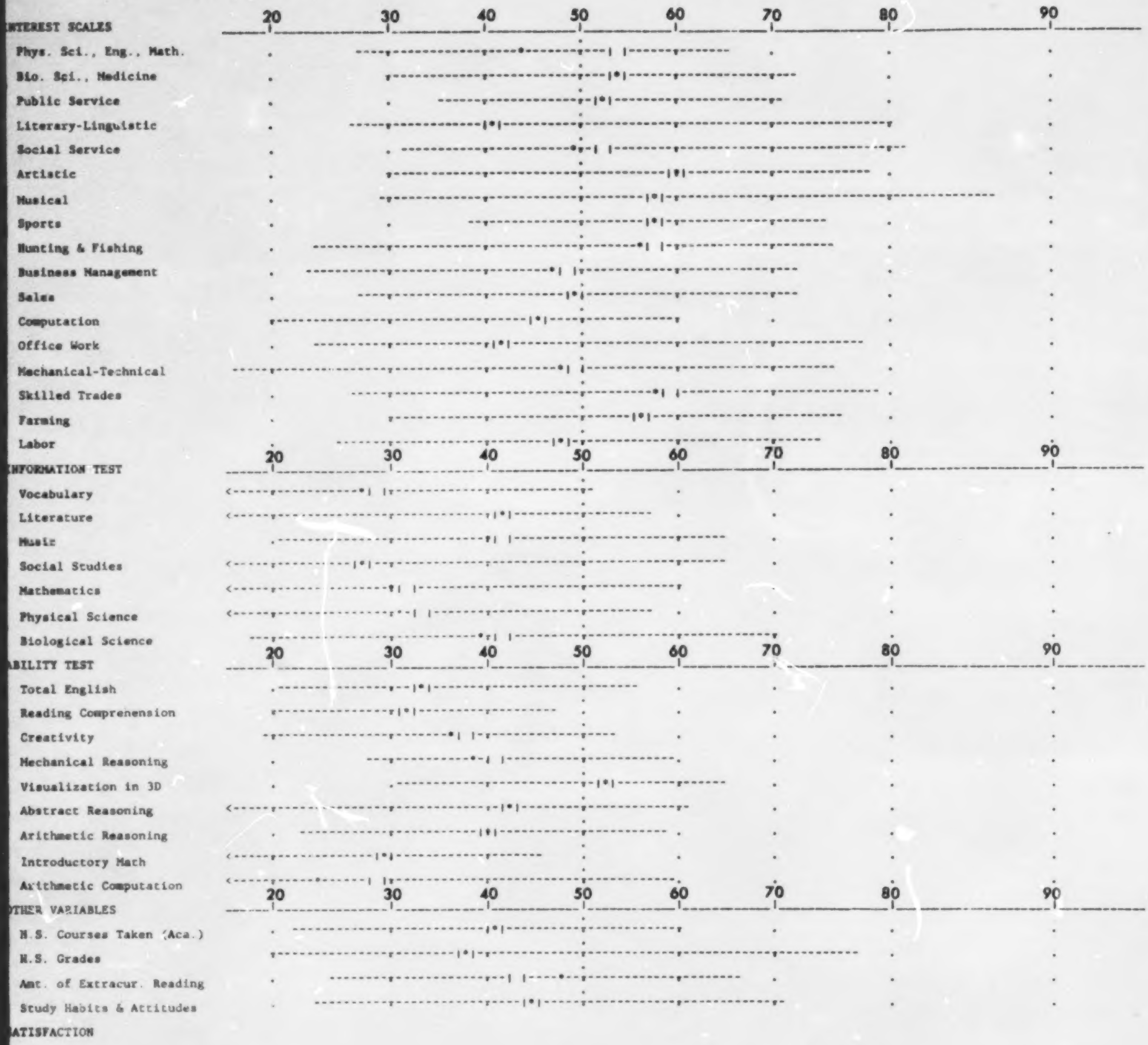
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Relationship of Work to Prior Training
Opportunity to Advance
Challenging Work

(* based on 38% of individuals in occupation)

HAIRDRESSER, MANICURIST, COSMETOLOGIST

(n = 7 per 1000)



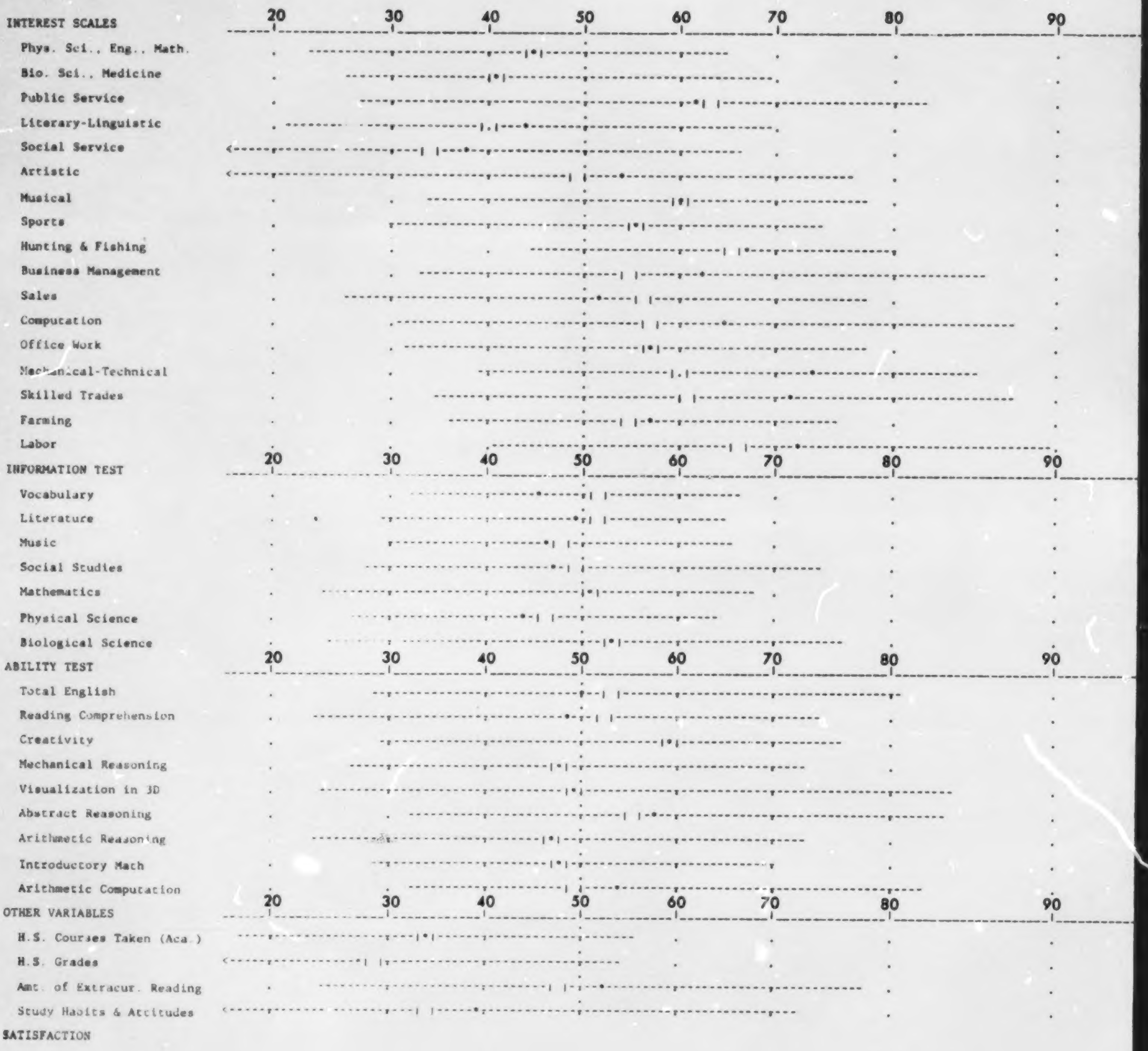
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
How Well I Can Do the Work
Relationship of Work to Prior Training
Quality of Surroundings

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Length of Work Week
Income to Start
Opportunity to Advance

(* based on 92% of individuals in occupation)

MAIL CARRIER

(n = 2 per 1000)



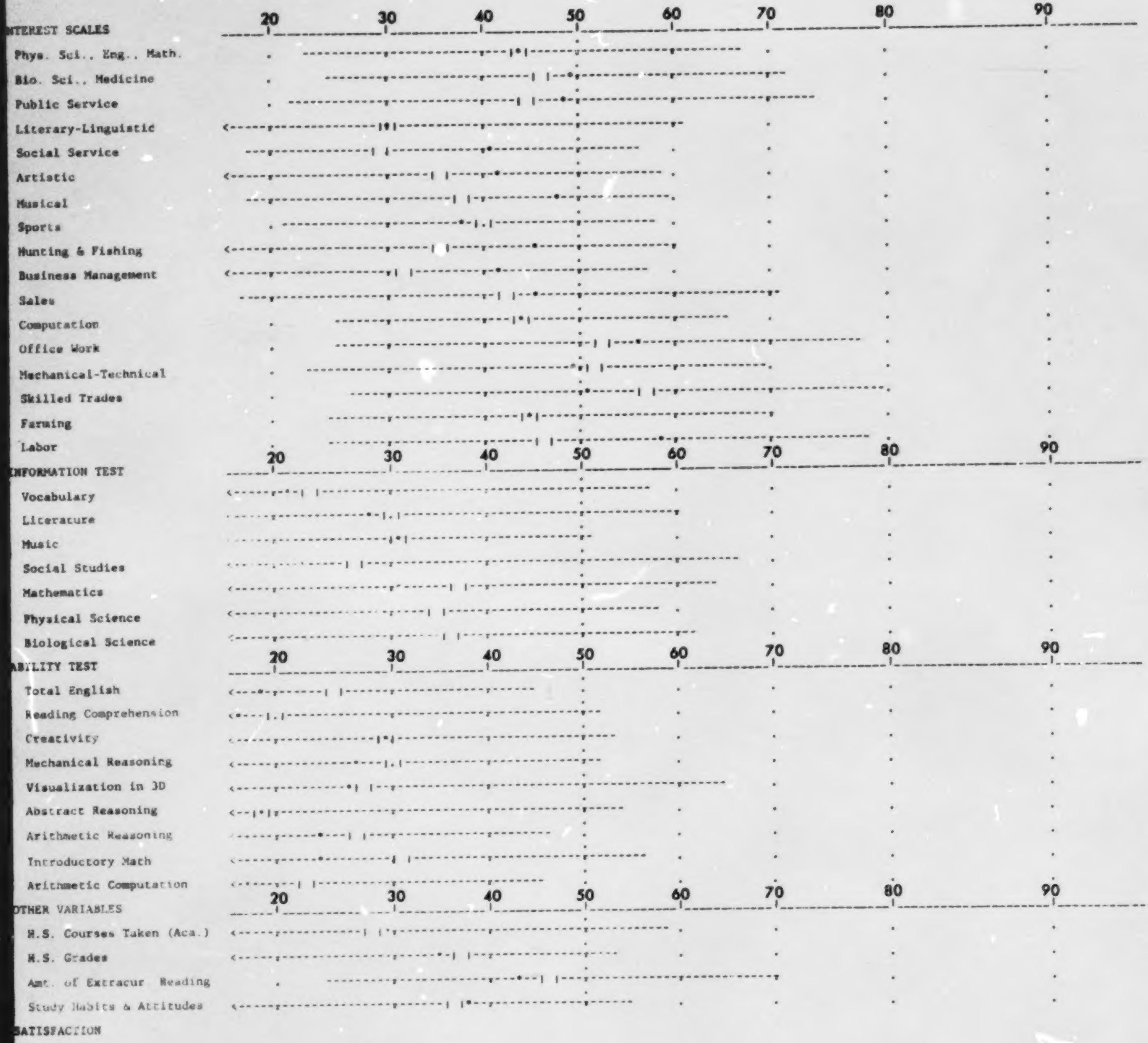
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Job Security
How Well I Can Do the Work
Length of Vacations

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Challenging Work
Opportunity to Advance
Length of Work Week

(* based on 77% of individuals in occupation)

MEDICAL AIDE

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

Importance of Work
How Well I Can Do the Work
Interesting Work

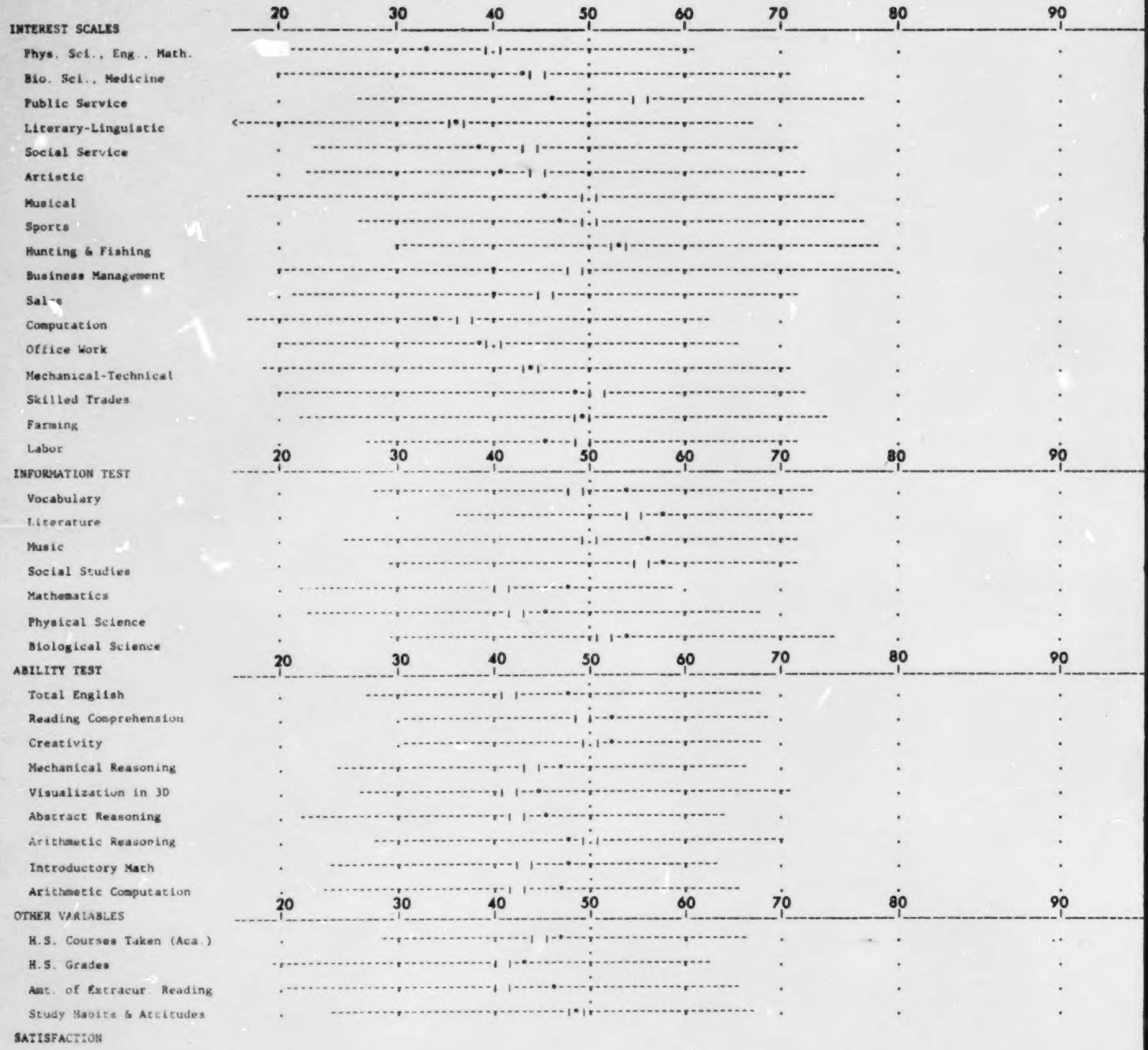
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

Opportunity to Advance
Income to Start
Income Expected

(* based on 63% of individuals in occupation)

POLICE OFFICER

(n = 7 per 1000)



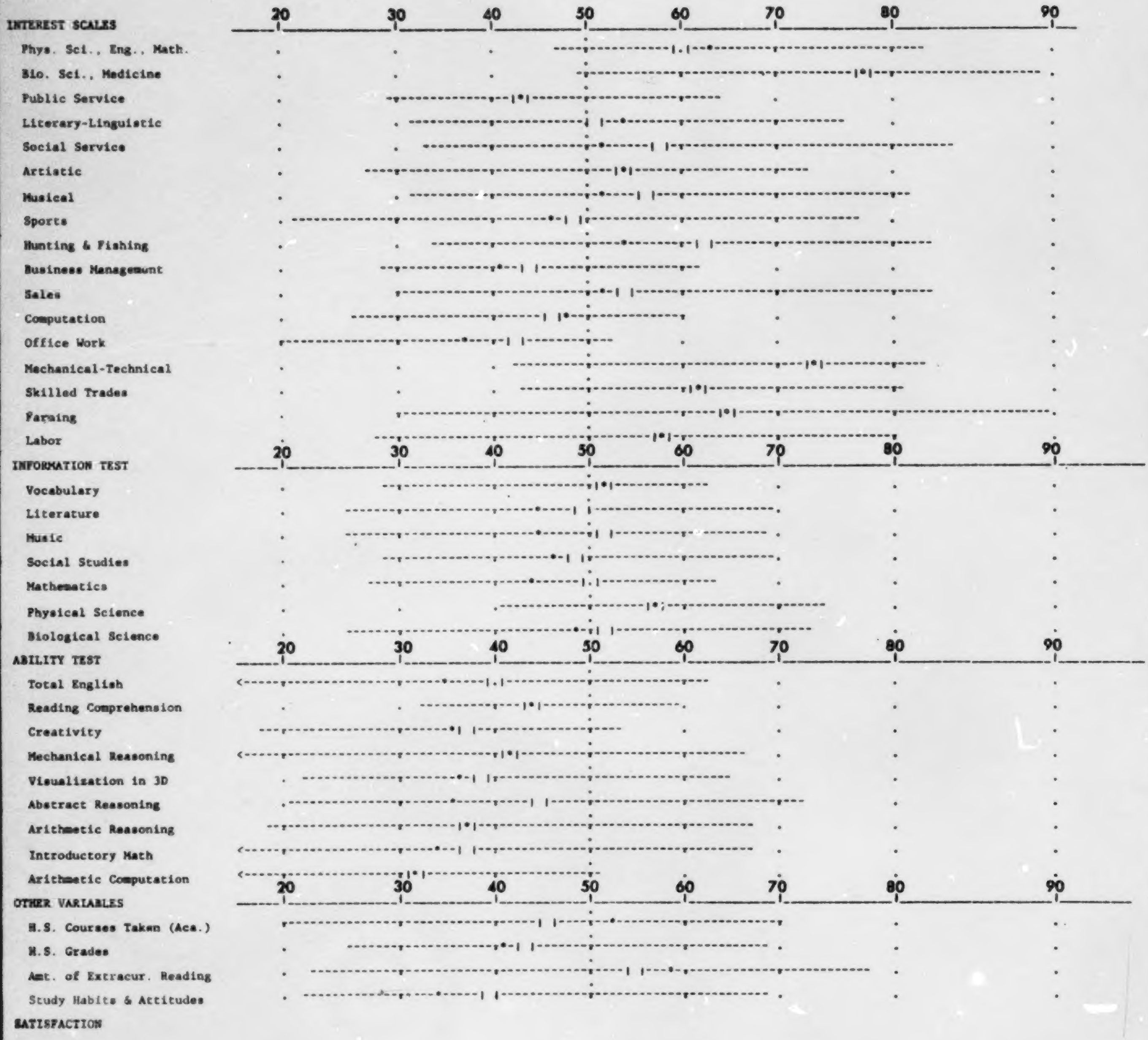
Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Importance of Work
Interesting Work
Job Security

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Quality of Surroundings
Status
Length of Vacations

(* based on 73% of individuals in occupation)

PRACTICAL NURSE

(n = 3 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying

- Importance of Work
- How Well I Can Do the Work
- Interesting Work

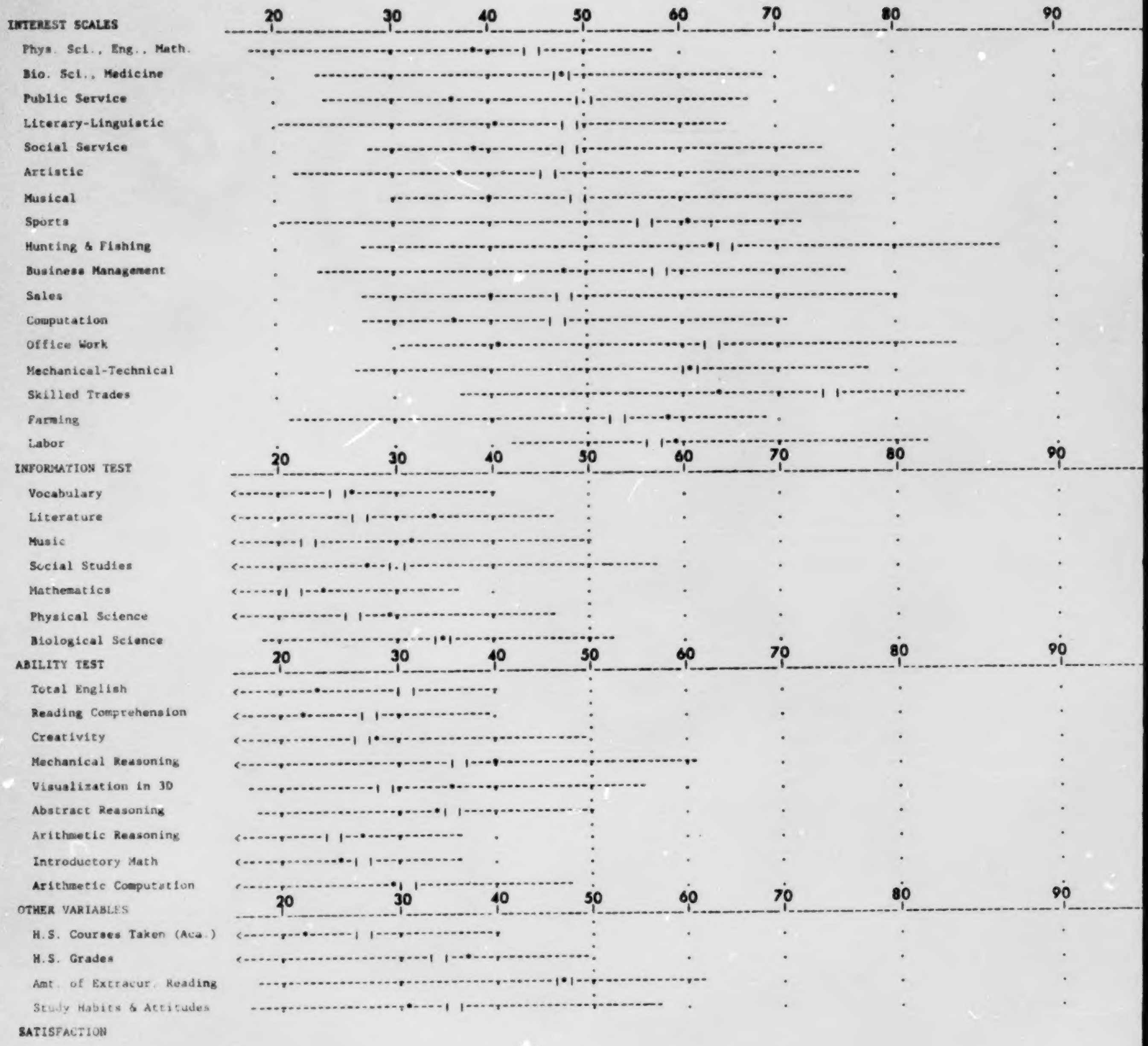
Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying

- Opportunity to Advance
- Income Expected
- Income to Start

(* based on 74% of individuals in occupation)

RAILROAD WORKER

(n = 4 per 1000)

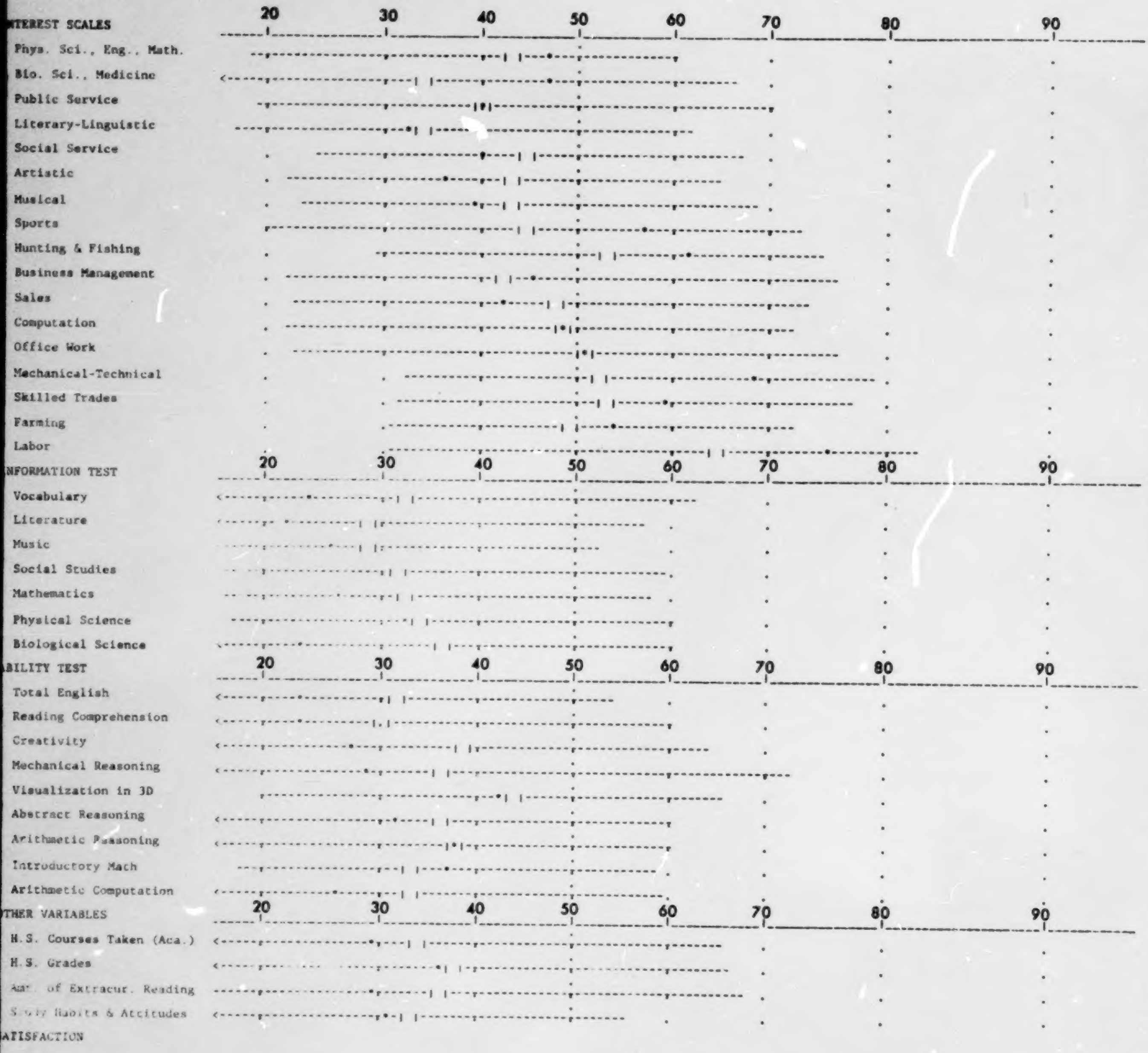


Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Income to Start
Income Expected
How Well I Can Do the Work

Aspects of Occupation that Project TALENT Participants Report as Important but Least Satisfying
Power
Relationship of Work to Prior Training
Length of Work Week

(* based on 56% of individuals in occupation)

SERVICES WORKER (PERSONAL & OTHER)
(e.g., waiter, hospital attendant, usher)
(n = 11 per 1000)



Aspects of Occupation that Project TALENT Participants Report as Important and Most Satisfying
Friendliness of Co-workers
How Well I Can Do the Work
Quality of Surroundings

Aspects of O pation that Project TALENT Participants Report as Important but Least Satisfying
Opportunity to Advance
Relationship of Work to Prior Training
Challenging Work

(* based on 40% of individuals in occupation)

Section 5: Other TALENT Studies Related to Career Education

The TALENT data bank contains over a billion information items and has been used by researchers throughout the country. Almost half of the more than 110 research projects conducted to date are related either directly or indirectly to career planning or career development. Results of some of these analyses are printed in: John Folger, Helen Astin, and Alan Bayer, *The Great Training Robbery*, 1970; and Dael Wolfle, *The Uses of Talent*, 1971. In addition, the TALENT staff has carried out many analyses of these data.

In addition, the TALENT staff has carried out many analyses of these data.

Some of the most recent TALENT reports pertaining to careers and counseling are listed below and a brief description of each is given. Two publications, also listed, are recommended as introductory reading to those who are unfamiliar with Project TALENT--its aims, methods, and content. Lastly, plans for building and disseminating a comprehensive set of vocational guidance materials are described.

TALENT Publications

A. Introduction to TALENT

Flanagan, J. C., Dailey, J. T., Shaycoft, M. F., Gorham, W. A., Orr, D. B., & Goldberg, I. *Design for a Study of American Youth*. Boston: Houghton Mifflin, 1962. (248 pp.) $5.00

This book, published early in the TALENT study, is recommended for counselors and others who wish to find out what the TALENT study is all about--how it was planned, who was tested, how the sample was chosen, how the tests were designed, what is in the tests, what the study is trying to find out, who sponsored it and why.

Project TALENT was funded by the U. S. Office of Education; the book tells about the signing of the contract in 1959, what agencies gave financial help in the early stages of the project, about the people who served on the original Research Advisory Committee, the original staff of Regional Coordinators, and the early research staff members of the project. Goals of the study are listed along with questions it would attempt to answer.

This book describes for the general reader how the students and schools were selected for participation in the study. Several chapters are devoted to explaining how the tests were designed, what kinds of items were included, and what they were intended to measure. Sample items from the TALENT battery are used for illustration. The book also describes how the tests were administered. This was a rather complex task as the tests were given in many different kinds of schools, from large urban schools to one-room rural schools where the teachers generally had little experience in administering large test batteries. Regional coordinators helped train teachers, where needed, to administer the tests. The book also gives a brief explanation of the purpose and plan for the follow-up surveys.

Wilson, S. R., & Wise, L. L. The American Citizen: 11 Years after High School. Palo Alto, Calif.: American Institutes for Research, 1975. (164 pp.)

This publication gives the response frequencies to the questions asked in the 11-year follow-up survey. It is a comprehensive overview of the available follow-up data on the TALENT participants and so is invaluable to researchers who wish to use the TALENT data and to others who want a more complete view of the TALENT participants.

The discussion is organized into three sections: educational, career, and personal and family experiences. The first section reports the proportions of the classes who attended regular and community colleges, majored in various fields, and received different sorts of vocational training. The career section deals with work experience, salary levels, and the importance of and satisfaction with various aspects of jobs. The final section contains a discussion of the marital and family experiences, as well as health, mobility, and other aspects of personal experience of the TALENT participants.

The report also relates a measure of the respondents' academic aptitude in high school to their answers to the follow-up survey 11 years later. This type of analysis demonstrates the power of the longitudinal data collected by Project TALENT. It is possible both to test the predictive validity of 1960 measures against later experiences and to use the 1960 data to explicate the responses to the follow-up questions in terms of earlier characteristics of the respondents.

B. TALENT on Career Development and Counseling

Flanagan, J. C., Tiedeman, D. V., Willis, M. B., & McLaughlin, D. H. *The Career Data Book: Results from Project TALENT's Five-Year Follow-Up Study*. Palo Alto, Calif.: American Institutes for Research, 1973. (397 pp.)

The Career Data Book: 1 copy $5.50; 10-59 copies $4.50 each; 50-99 copies $4.25 each; 100 or more copies $4.00 each.

Student's Booklet: 25 copies for $3.00; 100 copies for $10.00.

This is Project TALENT's first attempt to present the TALENT data in a form specifically designed for use by counselors. It is based on data acquired in the 5-year follow-up survey.

It gives detailed descriptions of the interests, acquired information, abilities, and background characteristics of 108,000 high school students who five years after high school planned careers in 138 different occupations. The 138 occupations are arranged in 12 career groups and are described by profiles of 38 of the most discriminating variables selected from the 109 included in the 1960 Project TALENT survey. These 38 variables include 17 interest scales, 7 information scales, 9 ability scales, and 5 other scales (socioeconomic status of the high school student's family, academic courses taken in high school, high school grades, amount of extracurricular reading, and study habits and attitudes). A brief job description based on the descriptions in the *Occupational Outlook Handbook* (U. S. Bureau of Labor Statistics) is given opposite each job profile.

The counselor who wishes to use *The Career Data Book* develops a profile for the counselee based on test results, grades, and other information about the student. Although the TALENT tests are available only for research use, A.I.R. has developed a battery of tests, *Planning Career Goals*, designed to be equivalent to the TALENT battery. This new battery will be published by CTB/McGraw-Hill (Del Monte Research Park, Monterey, CA 93940) in 1976. Other commercially available batteries that may be used to estimate equivalent TALENT scores on some of the ability scales are the *Differential Aptitude Test* (DAT), the *General Aptitude Test Battery* (GATB), and the *Flanagan Aptitude Classification Test* (FACT); tables of equivalents to TALENT tests are given in *The Career Data Book*. The counselor then compares the student's profile with the career group and occupational profiles in *The Career Data Book* as a basis for advising the student about fields to explore, areas in which more study is needed, and so forth.

Yen, W. M., & McLaughlin, D. H. *Post High School Education and Career Development*. Palo Alto, Calif.: American Institutes for Research, 1974. (90 pp.) Free

This book is intended for the counselor who is concerned about what kind of college or other post high school education will be most helpful for his students, as well as for the counselor who is concerned about advising counselees to try college if there seems to be a chance they may drop out.

Salary, job satisfaction, and employment rate of TALENT students who attended four-year colleges or junior colleges or who took noncollege post high school vocational training were compared to see if the type of school attended made a difference. To make sure that differences in salary, job satisfaction, and so forth were due to the type of education and not to differences in the person's background, academic aptitude and socioeconomic status were controlled.

Among the findings of the study: Salaries and job satisfaction were higher for college graduates, especially among whites. College dropouts had similar salary levels to those who had never attended college, but job satisfaction among whites was lower for those who had attended college and then dropped out than for those who had never attended college. Reason for dropping out of college affected salary and job satisfaction. Returning to finish college after dropping out increased salary for women but not for men; also, completing a junior college or noncollege training program increased salary only for women.

Further study is suggested of a larger sample of nonwhites and of the apparent ineffectiveness of junior college and noncollege programs in raising the average salary and job satisfaction of men.

McLaughlin, D. H. *Career Change and the Individual: A Project TALENT Report*. Palo Alto, Calif.: American Institutes for Research, in preparation.

This report presents an in-depth analysis of career change based on Project TALENT data. In a society where 70% of the men at age 28 are pursuing careers in quite different fields from what they planned to pursue as high school seniors, this phenomenon is of great importance. Such fundamental questions as "Is an individual who has a choice of persisting in a career or changing likely to benefit from a change?" and "What careers are not promising for individuals who are committed to a career change?" are considered and tentative answers suggested. In addition, the relationships between personality, education, type of career change made, and the increase in quality of life derived by the individual from the decision to change careers are explored.

The fundamental questions addressed by this report are listed below. They are not summarily answered in the report, but the results are interpreted in terms of their relevance to these questions.

(1) What career changes occur most frequently?

  (a) How do people who change careers differ from "persisters" in terms of abilities, interests, and background variables measured in high school?

  (b) How do people who change careers differ from persisters in terms of post high school experiences?

  (c) What types of careers are sources (lose members) and sinks (gain members) between 5 and 11 years after high school?

(2) What career changes are most beneficial to the individual?

  (a) What abilities, interests, and background variables are indicative that career change will be beneficial to the individual?

  (b) What post high school experiences are indicative that career change will benefit the individual?

  (c) What careers appear to benefit the individual by his/her switching into or out of them?

These are the questions that seemingly must be understood if the phenomenon of career change is to be better understood.

TALENT Plans, 1975-1980

A. Career Development Research: To improve understanding of career development and career decision-making

A greater understanding of the role of careers in the lives of individuals and of the process by which one moves into and through a career or several careers will lead to improved guidance counseling, to more relevant education, to improved levels of job satisfaction and self-fulfillment, and to increasing productivity.

Careers in our society are quite varied, however, and the empirical study of them must necessarily be a costly, long-term study. Current theories of careers have suffered from a lack of rich, broad, longitudinal data of the kind generated by Project TALENT on which to become clarified, refined, and validated. An important objective, then, is essentially to confront these theories with the data we have gathered, and to discover the general relationships in the data which any career development or decision-making theory must explain.

These are some of the general questions concerning career development we plan to investigate in the near future using TALENT data:

- What are the most frequent career development trajectories, and which are most satisfactory to the individual?
- What is the validity of a high school student's statement of interest or of value, in terms of later career choice and job satisfaction?
- What does it mean for an individual, and for society, when that individual changes careers?
- How does the choice of a particular career affect one's concept of job satisfaction and one's level of satisfaction?

One particular project with important implications for all of career development research and for guidance counseling is the retesting of the interests, aptitudes, and attitudes of some Project TALENT participants. The fundamental research question here is what the relation is between (1) the profiles of high school students who later enter career X and (2) the profiles of these individuals while in career X. The answer to this question is necessary in order not only to construct sensible career development theories but also to relate materials developed for the guidance of high school students to the career guidance problems of adults.

B. Career Development Program: To provide information gained from Project TALENT to individuals for use in career planning

Career decisions are an important part of living. In choosing an occupation, an individual provides opportunity for self-growth and the realization of personal goals in the world of work. But decisions are difficult without the information needed to clarify alternative goals and to suggest ways in which these goals may be reached. The TALENT data bank contains a great deal of relevant information on the career plans and decisions of the

TALENT participants and their feelings about themselves in relation to these occupational choices. What must be done is to make this important resource available in meaningful ways to individuals engaged in career development. With the publication of *The Career Data Book* and *Using the TALENT Profiles in Counseling*, the potential of the TALENT data in this area is just beginning to be realized.

The expansion of *Using the TALENT Profiles in Counseling* when the 11-year data for all four grades becomes available is one of several possible methods of communicating the data to students.

The project staff feels that the question of dissemination is very important and views the achievement of this objective as consisting ideally of three steps:

(1) The convening of experts in career guidance to help design alternative forms of presentation of the data for evaluation;

(2) the execution of whatever analyses of Project TALENT data are necessary for providing the alternative presentations; and

(3) Trial development and evaluation of the alternative presentation forms, using today's high school students as subjects.

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INDEX OF OCCUPATIONAL PROFILES

NOTE: Project TALENT job codes are given in parentheses after the occupation name.

Occupation	Career Group	Page
countant, Auditor, Comptroller (717)	3	63
counting/Recording Worker (755)	11	181
vertising Worker (724)	3	64
ronautical Engineer (244)	1	37
rplane Mechanic (822)	9	157
pliance Repair Worker (812)	9	158
chitect (250)	1	38
to/Bus/Truck Driver (853)	12	199
to Mechanic (821)	9	159
to Sales Representative (747)	8	143
nk Clerk/Teller (752)	11	182
nking/Finance Worker (711)	3	65
rber (892)	12	200
okkeeper (751)	11	183
siness Executive/Manager (730)	3	66
siness Supervisor (738)	8	144
tcher, Meat-Cutter (885)	12	201
rpenter (832)	10	171
shier (753)	11	184
rtified Public Accountant (716)	3	67
emical Engineer (245)	1	39
emist (231)	1	40
ty Planner (398)	3	68
vil/Hydraulic Engineer (241)	1	41
ergy and Other Religious Workers (521,522)	4	85
erk (769)	11	185
othing/Fashion Trades Worker (868)	9	160
llege Administrator (470)	5	111
mmercial Artist (545)	6	125
mputer Operator/Supervisor (758)	7	131
mputer Programmer (222)	3	69
mputer Services Repair Worker (814)	7	132
mputer Specialist/Engineer (229)	1	42
mputer Systems Analyst (221)	1	43
nservation Specialist: Wildlife, Forestry, griculture (314,313)	2	53
unselor (372)	4	86
ntist (332)	2	54
esel and Other Specialized Mechanic (820)	9	161
mestic Services Worker (896)	12	202
afting/Blueprint Designer (864)	7	133
itor (537)	5	112
ucational Specialist (489)	4	87
fficiency Expert (723)	3	70
lectrical/Electronic Engineer (242)	1	44
lectrician (810)	9	162
lectronics Technician (811)	7	134
listed Person: U. S. Air Force, Army, Navy, Marines, Coast Guard (641)	12	203
plosives/Munitions Worker and Other Construction Specialists (837)	10	172
rm/Ranch Owner or Manager (631,632)	8	145
rm/Ranch Worker (639)	12	204
refighter (666)	12	205
neral Laborer (899)	12	206
aduate Nurse (337)	2	55

Occupation	Career Group	Page
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Independent Proprietor (740)	8	147
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Insurance Sales Representative (746)	8	148
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Keypunch Operator (756)	11	186
Lawyer (393)	5	114
Legal Secretary (764)	11	187
Librarian (511)	5	115
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Machinist (828)	9	164
Mail Carrier (796)	12	208
Manufacturing Manager (731)	3	72
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Mechanical/Automotive Engineer (243)	1	45
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Medical/Dental Technologist (347)	7	136
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Plumber, Pipefitter (835)	10	176
Police Officer (661)	12	210
Practical Nurse (894)	12	211
Printing Trades Worker (861)	9	166
Psychologist (360)	5	116
Public Administrator (397)	3	77
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Occupation	Career Group	Page
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Social Worker (including Psychiatric Social Worker) (370,371)	4	89
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Statistician, Mathematician (212,211)	1	48
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Occupation	Career Group	Page
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High School English (424)	4	9
High School Foreign Language (425)	4	9
High School Home Economics (427)	4	9
High School Mathematics (421)	4	9
High School Physical Education (429)	4	9
High School Science (422)	4	10
High School Social Studies (423)	4	10
High School Trade/Industrial Education (428)	4	10
High School (Other Subjects) (420)	4	10
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(Not Elsewhere Classified) (400)	4	10
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Telephone Repair Worker (813)	9	16
Typist, Clerk-Typist (766)	11	19
Vocational Counselor (373)	4	10
Wholesale/Retail Trade Manager (732)	3	8
Writer: Non-Fiction (not including Journalist) and Fiction (533,532,531)	5	12